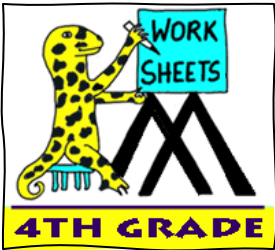


# MATH SALAMANDERS

## 4<sup>TH</sup> GRADE MATH GRAB PACK

### FALL EDITION

## ANSWERS



- This is the **answer pack** for our 4th Grade Math Grab Pack Fall Edition.
- We have **lots more free** fourth grade math resources – come visit our site for more!

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<https://www.math-salamanders.com/math-grab-packs.html>



## PLACE VALUE TO 1DP: EXPAND IT 1 ANSWERS

Write these numbers in expanded form.

---

$$1) \quad 15.2 \quad = \quad 10 + 5 + 0.2$$

---

$$2) \quad 37.5 \quad = \quad \underline{30 + 7 + 0.5}$$

---

$$3) \quad 29.6 \quad = \quad \underline{20 + 9 + 0.6}$$

---

$$4) \quad 32.1 \quad = \quad \underline{30 + 2 + 0.1}$$

---

$$5) \quad 15.4 \quad = \quad \underline{10 + 5 + 0.4}$$

---

$$6) \quad 32.6 \quad = \quad \underline{30 + 2 + 0.6}$$

---

$$7) \quad 61.3 \quad = \quad \underline{60 + 1 + 0.3}$$

---

$$8) \quad 80.5 \quad = \quad \underline{80 + 0.5}$$

---

$$9) \quad 37.1 \quad = \quad \underline{30 + 7 + 0.1}$$

---

$$10) \quad 93.2 \quad = \quad \underline{90 + 3 + 0.2}$$

---

$$11) \quad 74.6 \quad = \quad \underline{70 + 4 + 0.6}$$

---

$$12) \quad 68.3 \quad = \quad \underline{60 + 8 + 0.3}$$

---

$$13) \quad 59.4 \quad = \quad \underline{50 + 9 + 0.4}$$

---

$$14) \quad 9.7 \quad = \quad \underline{9 + 0.7}$$

---

$$15) \quad 41.3 \quad = \quad \underline{40 + 1 + 0.3}$$

---

$$16) \quad 19.8 \quad = \quad \underline{10 + 9 + 0.8}$$

---

$$17) \quad 30.4 \quad = \quad \underline{30 + 0.4}$$

---

$$18) \quad 7.6 \quad = \quad \underline{7 + 0.6}$$

---

$$19) \quad 36.5 \quad = \quad \underline{30 + 6 + 0.5}$$

---

$$20) \quad 194.1 \quad = \quad \underline{100 + 90 + 4 + 0.1}$$

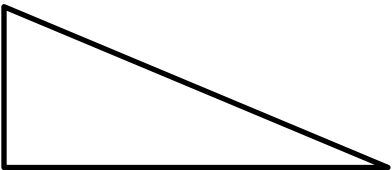
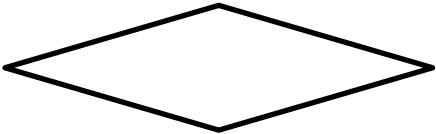
---

## STANDARD FORM UP TO 5-DIGITS SHEET 1 ANSWERS

Write down these numbers in standard form.

|     |                                                     |   |               |
|-----|-----------------------------------------------------|---|---------------|
| 1)  | 8 thousands + 7 hundreds + 4 tens + 5 ones          | = | <u>8,745</u>  |
| 2)  | 5 thousands + 2 hundreds + 9 tens + 3 ones          | = | <u>5,293</u>  |
| 3)  | 4 ten thousands + 7 thousands + 3 hundreds          | = | <u>47,300</u> |
| 4)  | 2 ten thousands + 8 hundreds + 5 tens + 9 ones      | = | <u>20,859</u> |
| 5)  | 7 ten thousands + 2 thousands + 8 tens + 2 ones     | = | <u>72,082</u> |
| 6)  | 3 ten thousands + 6 thousands + 8 hundreds + 4 tens | = | <u>36,840</u> |
| 7)  | 8 ten thousands + 2 hundreds + 9 tens               | = | <u>80,290</u> |
| 8)  | 3 thousands + 7 ones                                | = | <u>3,007</u>  |
| 9)  | 4 ten thousands + 8 hundreds + 5 ones               | = | <u>40,805</u> |
| 10) | 3 ten thousands + 9 thousands + 2 tens              | = | <u>39,020</u> |
| 11) | 5 ten thousands + 1 thousand + 8 hundreds + 3 tens  | = | <u>51,830</u> |
| 12) | 9 ten thousands + 7 hundreds + 4 tens + 8 ones      | = | <u>90,748</u> |
| 13) | 7 ten thousands + 6 tens                            | = | <u>70,060</u> |
| 14) | 5 ten thousands + 2 hundreds + 9 ones               | = | <u>50,209</u> |
| 15) | 6 thousands + 9 hundreds + 3 ones                   | = | <u>6,903</u>  |
| 16) | 7 ten thousands + 8 tens + 4 ones                   | = | <u>70,084</u> |
| 17) | 2 ten thousands + 1 thousand + 7 hundred + 2 ones   | = | <u>21,702</u> |
| 18) | 5 ten thousands + 2 hundreds + 6 tens + 7 ones      | = | <u>50,267</u> |
| 19) | 4 ten thousands + 6 hundreds + 9 ones               | = | <u>40,609</u> |
| 20) | 8 ten thousands + 7 hundreds + 5 tens               | = | <u>80,750</u> |

# MENTAL MATH QUIZ 4:2 ANSWERS

|     |                                                                                                                                                              |                                  |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| 1)  | $0.6 \times 4$                                                                                                                                               | <b>2.4</b>                       |
| 2)  | Which two of the numbers below are prime?<br>17 14 15 18 19 10                                                                                               | <b>17 and 19</b>                 |
| 3)  | How many acute angles?<br>                                                 | <b>2</b>                         |
| 4)  | What is the perimeter of a square with sides 5 inches?                                                                                                       | <b>20 inches</b>                 |
| 5)  | Which of these numbers are <b>divisible</b> by 5?<br>32 51 45 20 18                                                                                          | <b>45 and 20</b>                 |
| 6)  | Add together $\frac{2}{10}$ , $\frac{3}{10}$ and $\frac{4}{10}$                                                                                              | <b><math>\frac{9}{10}</math></b> |
| 7)  | $9278 = 9008 + \underline{\hspace{1cm}}$                                                                                                                     | <b>270</b>                       |
| 8)  | What is the name of this shape?<br><br>trapezoid rectangle rhombus square | <b>rhombus</b>                   |
| 9)  | Round 348 to the nearest ten.                                                                                                                                | <b>350</b>                       |
| 10) | A 6lb chicken takes 15 minutes plus 20 minutes per pound to cook. How long do I need to cook it for? <u>   </u> h <u>   </u> min                             | <b>2 h 15 min</b>                |
| 11) | I buy 10 raffle tickets at \$1.60 per ticket. How much money have I spent?                                                                                   | <b>\$16</b>                      |
| 12) | $\frac{1}{4}$ of 32 subtract $\frac{1}{3}$ of 18                                                                                                             | <b><math>8 - 6 = 2</math></b>    |
| 13) | How many quarters make \$3?                                                                                                                                  | <b>12</b>                        |
| 14) | Sally spends \$4.30 on a sandwich and \$2.50 on a drink. How much change from \$10?                                                                          | <b>\$3.20</b>                    |
| 15) | In a class, $\frac{2}{5}$ of the children are boys. What fraction are girls?                                                                                 | <b><math>\frac{3}{5}</math></b>  |
| 16) | I set off at 7:40am. My journey takes 45 min. When do I arrive?                                                                                              | <b>8:25am</b>                    |

## NEWTON'S CROSSES PUZZLE 4 ANSWERS

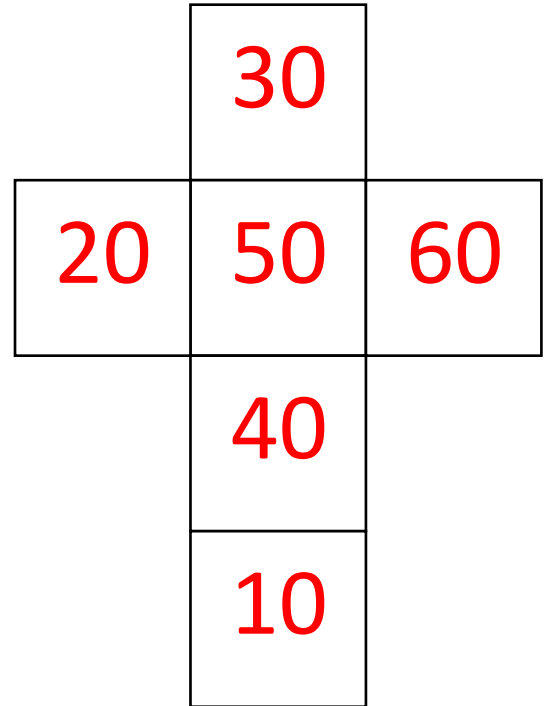
Please note that there are several solutions for each cross puzzle. As long as the number in the center of the cross is the same as the solution below, and the rows and columns contain the same numbers then the answer should work even if the numbers are in a different place.

**One** solution for each puzzle is given.

1)

10 20 30 40 50 60

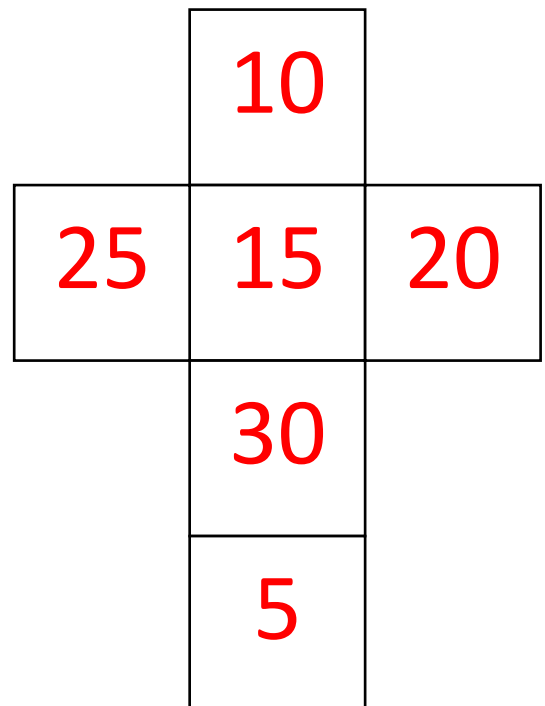
Total must be 130



2)

5 10 15 20 25 30

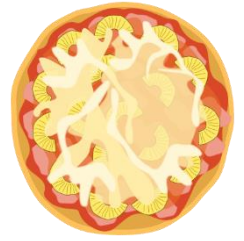
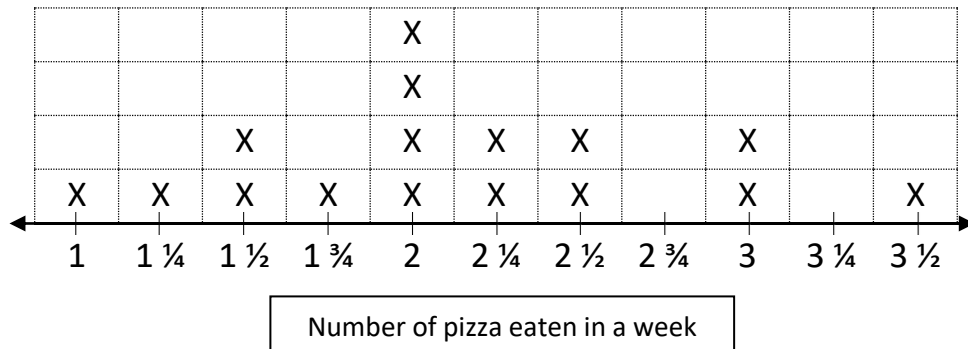
Total must be 60



# INTERPRETING LINE PLOTS SHEET 4:1 ANSWERS

1) A group of students record how many pizza they eat in a week.

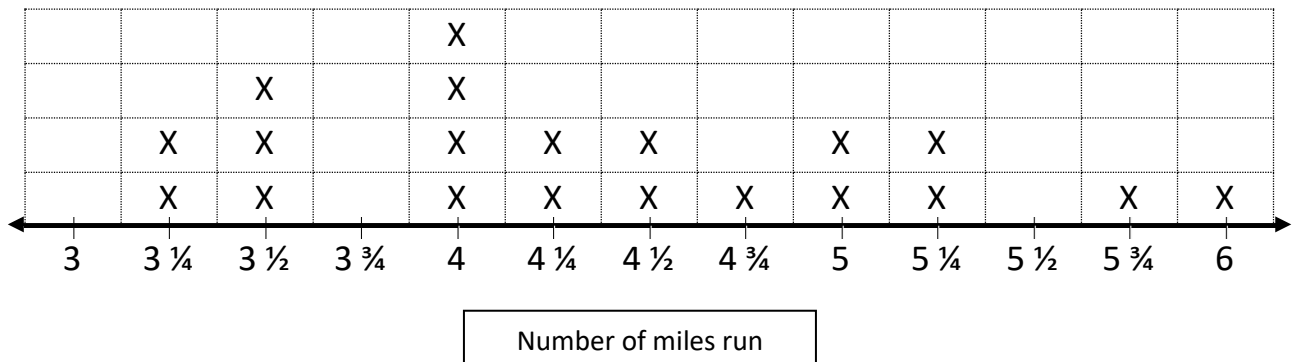
Here is a line plot showing their results:



Tick the correct box about each of these statements.

| Statement                                                                      | True                                | False                               | Can't tell                          |
|--------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| <i>Most students ate more than 2 pizza.</i>                                    |                                     | <input checked="" type="checkbox"/> |                                     |
| <i>Twice as many students ate 2 pizza than 3 pizza.</i>                        | <input checked="" type="checkbox"/> |                                     |                                     |
| <i>Pizza was more popular with boys than girls.</i>                            |                                     |                                     | <input checked="" type="checkbox"/> |
| <i>A quarter of the students ate 1 <math>\frac{1}{2}</math> pizza or less.</i> | <input checked="" type="checkbox"/> |                                     |                                     |

2) This line plot shows the number of miles completed by a group of runners.



- How many people ran over 5 miles? 4
- How much further did the person who ran the longest distance run than the person who ran the shortest distance? 2  $\frac{3}{4}$  miles
- What fraction of runners ran less than 4 miles?  $\frac{5}{20}$  or  $\frac{1}{4}$

# COLUMN ADDITION 3 DIGITS MULTI-ADDENDS

## SHEET 1 ANSWERS

$$\begin{array}{r} 1) \quad 5 \ 2 \ 7 \\ + \quad 9 \ 4 \\ + \ 1 \ 3 \ 8 \\ \hline 7 \ 5 \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 2 \ 6 \ 4 \\ + \ 6 \ 0 \ 5 \\ + \quad 3 \ 8 \\ \hline 9 \ 0 \ 7 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 4 \ 7 \ 1 \\ + \ 3 \ 2 \ 8 \\ + \ 1 \ 3 \ 3 \\ \hline 9 \ 3 \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 8 \ 4 \ 5 \\ + \ 1 \ 6 \ 9 \\ + \ 2 \ 4 \ 6 \\ \hline 1 \ 2 \ 6 \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 7 \ 1 \ 4 \\ + \quad 6 \ 7 \\ + \ 5 \ 2 \ 8 \\ \hline 1 \ 3 \ 0 \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 8 \ 0 \ 3 \\ + \ 1 \ 5 \ 8 \\ + \quad 2 \ 9 \\ \hline 9 \ 9 \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 6 \ 8 \ 3 \\ + \ 2 \ 3 \ 1 \\ + \ 7 \ 3 \ 5 \\ \hline 1 \ 6 \ 4 \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad \quad 8 \ 9 \\ + \ 3 \ 6 \ 2 \\ + \ 8 \ 1 \ 4 \\ \hline 1 \ 2 \ 6 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 4 \ 2 \ 5 \\ + \ 1 \ 7 \ 6 \\ + \quad 8 \ 2 \\ + \ 3 \ 2 \ 1 \\ \hline 1 \ 0 \ 0 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \quad 6 \ 8 \ 1 \\ + \quad 4 \ 5 \\ + \quad 5 \ 7 \\ + \ 1 \ 6 \ 9 \\ \hline 9 \ 5 \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \quad 9 \ 0 \ 3 \\ + \ 1 \ 5 \ 4 \\ + \ 5 \ 3 \ 6 \\ + \quad 6 \ 6 \\ \hline 1 \ 6 \ 5 \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 12) \quad 3 \ 7 \ 2 \\ + \ 1 \ 8 \ 5 \\ + \quad 7 \ 9 \\ + \ 4 \ 3 \ 6 \\ \hline 1 \ 0 \ 7 \ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 13) \quad 7 \ 3 \ 6 \\ + \quad 6 \ 7 \\ + \ 4 \ 5 \ 9 \\ + \quad 3 \ 8 \\ + \ 2 \ 4 \ 3 \\ \hline 1 \ 5 \ 4 \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 14) \quad 5 \ 8 \ 4 \\ + \ 1 \ 3 \ 7 \\ + \ 3 \ 8 \ 4 \\ + \ 4 \ 6 \ 1 \\ + \ 5 \ 0 \ 8 \\ \hline 2 \ 0 \ 7 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 15) \quad 3 \ 7 \ 8 \\ + \quad 9 \ 6 \\ + \ 4 \ 0 \ 3 \\ + \ 5 \ 1 \ 6 \\ + \ 2 \ 8 \ 0 \\ \hline 1 \ 6 \ 7 \ 3 \\ \hline \end{array}$$

$$\begin{array}{r} 16) \quad 4 \ 1 \ 1 \\ + \ 7 \ 8 \ 4 \\ + \quad 6 \ 9 \\ + \ 3 \ 1 \ 5 \\ + \ 5 \ 5 \ 2 \\ \hline 2 \ 1 \ 3 \ 1 \\ \hline \end{array}$$

## FRACTION OF A NUMBER PROBLEMS 1A ANSWERS

|    |                                                                                                                                                                                                                                                                                                                     | WORKING OUT                                                             |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1) | There are a total of 20 clownfish and angelfish in a tank.<br> $\frac{1}{4}$ of the fish are angelfish.<br>How many of each type of fish are there?                                                                                | $\frac{1}{4}$ of 20 = 5<br>$20 - 5 = 15$                                |
|    | There are <u>5</u> angelfish and <u>15</u> clownfish.                                                                                                                                                                                                                                                               |                                                                         |
| 2) | Newton swims a total of 12 lengths. He swims a third of the lengths on his front and the rest on his back.<br> How many lengths does he swim on his front?                                                                         | $\frac{1}{3}$ of 12 = 4                                                 |
|    | He swims <u>4</u> lengths on his front.                                                                                                                                                                                                                                                                             |                                                                         |
| 3) | There are 30 people on a train. A fifth of the people get off at the next stop. How many get off the train?<br>                                                                                                                    | $\frac{1}{5}$ of 30 = 6                                                 |
|    | <u>6</u> people get off the train.                                                                                                                                                                                                                                                                                  |                                                                         |
| 4) | Captain has some gold and silver coins. He has 24 coins in all. $\frac{1}{6}$ of his coins are gold and the rest are silver.<br> How many of each sort of coin does he have?<br>He has <u>4</u> gold and <u>20</u> silver coins. | $\frac{1}{6}$ of 24 = 4<br>$24 - 4 = 20$                                |
| 5) | Sally and Newton go fishing and catch 12 fish. Sally catches $\frac{3}{4}$ of the fish. How many does Newton catch?<br>                                                                                                          | $\frac{3}{4}$ of 12 = 9<br>$12 - 9 = 3$<br>(or $\frac{1}{4}$ of 12 = 3) |
|    | Newton catches <u>3</u> fish.                                                                                                                                                                                                                                                                                       |                                                                         |
| 6) | There is a group of 25 puffins on an island. $\frac{1}{5}$ of the group are adults and the rest are pufflings (puffin chicks). How many adults and pufflings are there?<br>                                                      | $\frac{1}{5}$ of 25 = 5<br>$25 - 5 = 20$                                |
|    | There are <u>5</u> adults and <u>20</u> pufflings.                                                                                                                                                                                                                                                                  |                                                                         |

## MULTIPLYING BY 10 SHEET 1 ANSWERS

A) Work out these multiplications.

- |                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|
| 1) $7 \times 10 = \underline{70}$    | 2) $2 \times 10 = \underline{20}$    | 3) $10 \times 8 = \underline{80}$    |
| 4) $12 \times 10 = \underline{120}$  | 5) $10 \times 15 = \underline{150}$  | 6) $18 \times 10 = \underline{180}$  |
| 7) $10 \times 16 = \underline{160}$  | 8) $22 \times 10 = \underline{220}$  | 9) $10 \times 21 = \underline{210}$  |
| 10) $32 \times 10 = \underline{320}$ | 11) $10 \times 30 = \underline{300}$ | 12) $28 \times 10 = \underline{280}$ |
| 13) $10 \times 43 = \underline{430}$ | 14) $54 \times 10 = \underline{540}$ | 15) $10 \times 37 = \underline{370}$ |
| 16) $80 \times 10 = \underline{800}$ | 17) $10 \times 47 = \underline{470}$ | 18) $59 \times 10 = \underline{590}$ |
| 19) $10 \times 78 = \underline{780}$ | 20) $65 \times 10 = \underline{650}$ | 21) $10 \times 84 = \underline{840}$ |
| 22) $96 \times 10 = \underline{960}$ | 23) $10 \times 59 = \underline{590}$ | 24) $48 \times 10 = \underline{480}$ |

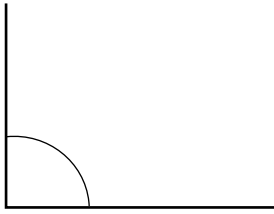
B) Make each of these numbers ten times bigger.

- |                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|
| 1) $14 \rightarrow \underline{140}$  | 2) $26 \rightarrow \underline{260}$  | 3) $31 \rightarrow \underline{310}$  |
| 4) $40 \rightarrow \underline{400}$  | 5) $19 \rightarrow \underline{190}$  | 6) $55 \rightarrow \underline{550}$  |
| 7) $73 \rightarrow \underline{730}$  | 8) $69 \rightarrow \underline{690}$  | 9) $94 \rightarrow \underline{940}$  |
| 10) $51 \rightarrow \underline{510}$ | 11) $86 \rightarrow \underline{860}$ | 12) $49 \rightarrow \underline{490}$ |

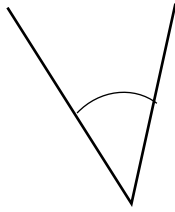
C) Fill in the missing numbers

- |                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|
| 1) $13 \times \underline{10} = 130$  | 2) $\underline{18} \times 10 = 180$  | 3) $10 \times \underline{15} = 150$  |
| 4) $\underline{10} \times 19 = 190$  | 5) $25 \times 10 = \underline{250}$  | 6) $\underline{10} \times 42 = 420$  |
| 7) $10 \times \underline{36} = 360$  | 8) $\underline{55} \times 10 = 550$  | 9) $10 \times \underline{30} = 300$  |
| 10) $\underline{10} \times 28 = 280$ | 11) $10 \times \underline{74} = 740$ | 12) $\underline{39} \times 10 = 390$ |

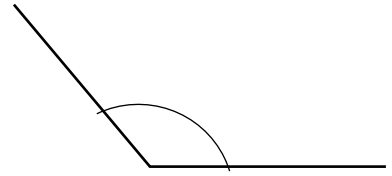
## ANGLE CLASSIFICATION 1 ANSWERS



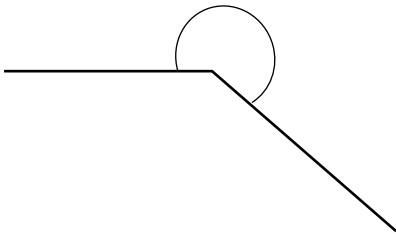
Angle: **right**



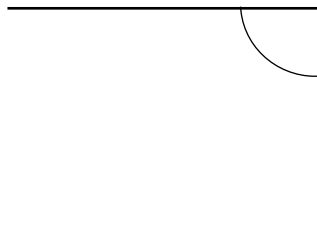
Angle: **acute**



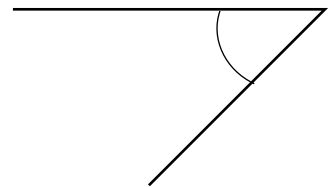
Angle: **obtuse**



Angle: **reflex**



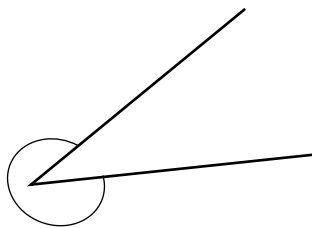
Angle: **right**



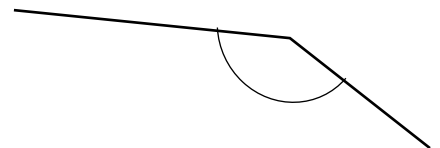
Angle: **acute**



Angle: **straight**



Angle: **reflex**



Angle: **obtuse**

# NUMBER SEARCH PUZZLE B1 ANSWERS

|              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <del>3</del> | <del>5</del> | 3            | <del>1</del> | <del>7</del> | <del>1</del> | <del>2</del> | <del>8</del> | <del>7</del> | 6            |
| 4            | <del>1</del> | <del>1</del> | <del>9</del> | <del>7</del> | 6            | 8            | <del>0</del> | 4            | <del>5</del> |
| 5            | 5            | <del>9</del> | <del>6</del> | <del>2</del> | 2            | <del>5</del> | 0            | <del>9</del> | 4            |
| 9            | <del>0</del> | <del>8</del> | <del>3</del> | <del>8</del> | <del>2</del> | 1            | <del>3</del> | 5            | <del>3</del> |
| <del>1</del> | <del>1</del> | 1            | <del>8</del> | 8            | <del>6</del> | <del>5</del> | 8            | 5            | <del>3</del> |
| <del>5</del> | <del>3</del> | 9            | <del>5</del> | <del>2</del> | <del>7</del> | <del>9</del> | <del>6</del> | <del>1</del> | <del>4</del> |
| <del>0</del> | 4            | <del>2</del> | <del>1</del> | 2            | <del>4</del> | <del>6</del> | <del>5</del> | 6            | <del>2</del> |
| <del>2</del> | <del>8</del> | <del>5</del> | <del>7</del> | 2            | <del>8</del> | <del>2</del> | 8            | <del>1</del> | <del>8</del> |
| <del>9</del> | <del>2</del> | 8            | 9            | <del>6</del> | <del>2</del> | <del>1</del> | 1            | 1            | <del>5</del> |
| <del>8</del> | 7            | <del>4</del> | <del>0</del> | <del>9</del> | <del>2</del> | <del>9</del> | <del>8</del> | <del>5</del> | <del>7</del> |

|                |      |      |
|----------------|------|------|
| <del>126</del> | 1287 | 5935 |
| 250            | 2051 | 6219 |
| 310            | 3913 | 7728 |
| 416            | 3342 | 8251 |
| 517            | 4092 | 8476 |
| 691            | 4288 | 9515 |
| 758            | 5168 | 9825 |

## FACTORS SHEET 4:1 ANSWERS

| NUMBER | FACTORS      |
|--------|--------------|
| 1      | 1            |
| 2      | 1,2          |
| 3      | 1,3          |
| 4      | 1,2,4        |
| 5      | 1,5          |
| 6      | 1,2,3,6      |
| 7      | 1,7          |
| 8      | 1,2,4,8      |
| 9      | 1,3,9        |
| 10     | 1,2,5,10     |
| 11     | 1,11         |
| 12     | 1,2,3,4,6,12 |

| NUMBER | FACTORS           |
|--------|-------------------|
| 13     | 1,13              |
| 14     | 1,2,7,14          |
| 15     | 1,3,5,15          |
| 16     | 1,2,4,8,16        |
| 17     | 1,17              |
| 18     | 1,2,3,6,9,18      |
| 19     | 1,19              |
| 20     | 1,2,4,5,10,20     |
| 21     | 1,3,7,21          |
| 22     | 1,2,11,22         |
| 23     | 1,23              |
| 24     | 1,2,3,4,6,8,12,24 |

*Numbers that have exactly 2 factors (1 and themselves) are called prime numbers. Highlight all the prime numbers from 1 to 24 in the table.*

## LINE GRAPH WORKSHEET 4A PUPPY'S WEIGHT ANSWERS



*Answer the following questions about the data.*

- 1) How heavy was the puppy at 3 weeks? 11 oz
- 2) How heavy was the puppy at 7 weeks? 19.5 oz
- 3) How much heavier was the puppy at 5 weeks compared to 2 weeks? 6 oz
- 4) Which week did the puppy weigh 13 oz? Week 4
- 5) How much weight did the puppy gain from birth to 8 weeks? 17.5 oz (or 17 ½ oz)
- 6) True or false: By the time the puppy was 3 weeks old, it had more than tripled its birth weight? false

## MONEY SUBTRACTION UP TO \$10 SHEET 2 ANSWERS

$$\begin{array}{r} 1) \quad \$4.65 \\ - \$1.83 \\ \hline \$2.82 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad \$7.29 \\ - \$3.54 \\ \hline \$3.75 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad \$9.68 \\ - \$3.43 \\ \hline \$6.25 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad \$7.07 \\ - \$2.62 \\ \hline \$4.45 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad \$6.89 \\ - \$4.55 \\ \hline \$2.34 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad \$7.47 \\ - \$4.52 \\ \hline \$2.95 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad \$9.90 \\ - \$6.57 \\ \hline \$3.33 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad \$8.29 \\ - \$1.65 \\ \hline \$6.64 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad \$5.21 \\ - \$1.75 \\ \hline \$3.46 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \quad \$6.32 \\ - \$3.58 \\ \hline \$2.74 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \quad \$7.04 \\ - \$5.87 \\ \hline \$1.17 \\ \hline \end{array}$$

$$\begin{array}{r} 12) \quad \$4.45 \\ - \$1.99 \\ \hline \$2.46 \\ \hline \end{array}$$

$$\begin{array}{r} 13) \quad \$7.65 \\ - \$5.45 \\ \hline \$2.20 \\ \hline \end{array}$$

$$\begin{array}{r} 14) \quad \$8.23 \\ - \$4.87 \\ \hline \$3.36 \\ \hline \end{array}$$

$$\begin{array}{r} 15) \quad \$5.00 \\ - \$1.85 \\ \hline \$3.15 \\ \hline \end{array}$$

$$\begin{array}{r} 16) \quad \$6.24 \\ - \$3.65 \\ \hline \$2.59 \\ \hline \end{array}$$

$$\begin{array}{r} 17) \quad \$8.47 \\ - \$6.65 \\ \hline \$1.82 \\ \hline \end{array}$$

$$\begin{array}{r} 18) \quad \$6.31 \\ - \$3.84 \\ \hline \$2.47 \\ \hline \end{array}$$

$$\begin{array}{r} 19) \quad \$9.00 \\ - \$6.38 \\ \hline \$2.62 \\ \hline \end{array}$$

$$\begin{array}{r} 20) \quad \$5.16 \\ - \$3.59 \\ \hline \$1.57 \\ \hline \end{array}$$

$$\begin{array}{r} 21) \quad \$6.12 \\ - \$4.25 \\ \hline \$1.87 \\ \hline \end{array}$$

$$\begin{array}{r} 22) \quad \$7.67 \\ - \$5.34 \\ \hline \$2.33 \\ \hline \end{array}$$

$$\begin{array}{r} 23) \quad \$8.14 \\ - \$2.68 \\ \hline \$5.46 \\ \hline \end{array}$$

$$\begin{array}{r} 24) \quad \$5.20 \\ - \$3.26 \\ \hline \$1.94 \\ \hline \end{array}$$

# EQUIVALENT FRACTIONS SHEET 1

## NUMBER LINES ANSWERS

$$1) \frac{1}{2} = \frac{3}{6}$$

$$2) \frac{1}{4} = \frac{2}{8}$$

$$3) \frac{1}{3} = \frac{2}{6}$$

$$4) \frac{1}{4} = \frac{3}{12}$$

$$5) \frac{1}{2} = \frac{4}{8}$$

$$6) \frac{1}{3} = \frac{4}{12}$$

$$7) \frac{6}{12} = \frac{1}{2}$$

$$8) \frac{2}{3} = \frac{4}{6}$$

$$9) \frac{3}{4} = \frac{9}{12}$$

$$10) \frac{6}{8} = \frac{3}{4}$$

$$11) \frac{9}{12} = \frac{3}{4}$$

$$12) \frac{6}{12} = \frac{4}{8}$$

$$13) \frac{4}{6} = \frac{8}{12}$$

$$14) \frac{3}{6} = \frac{2}{4}$$

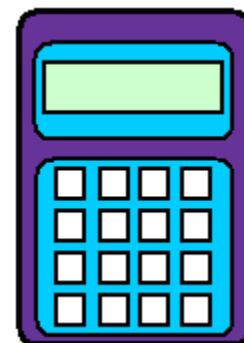
$$15) \frac{10}{12} = \frac{5}{6}$$

$$16) \frac{8}{12} = \frac{2}{3}$$

## BROKEN CALCULATOR PROBLEM 2 ANSWERS

Captain's calculator has broken.

Unfortunately, none of the buttons work apart from the 3, 5, +, - and = button.



You can make any of the numbers from 1 to 20 in a variety of ways. There is an example of how to make each number below.

One interesting point is that you can make the numbers 11 to 20 simply by adding 5 + 5 to all the answers from 1 to 10.

|                                   |      |
|-----------------------------------|------|
| <u><math>3 + 3 - 5</math></u>     | = 1  |
| <u><math>5 - 3</math></u>         | = 2  |
| <u><math>3</math></u>             | = 3  |
| <u><math>3 + 3 + 3 - 5</math></u> | = 4  |
| <u><math>5</math></u>             | = 5  |
| <u><math>3 + 3</math></u>         | = 6  |
| <u><math>5 + 5 - 3</math></u>     | = 7  |
| <u><math>5 + 3</math></u>         | = 8  |
| <u><math>3 + 3 + 3</math></u>     | = 9  |
| <u><math>5 + 5</math></u>         | = 10 |

|                                       |      |
|---------------------------------------|------|
| $3 + 3 + 5$                           | = 11 |
| <u><math>3 + 3 + 3 + 3</math></u>     | = 12 |
| <u><math>5 + 5 + 3</math></u>         | = 13 |
| <u><math>3 + 3 + 3 + 5</math></u>     | = 14 |
| <u><math>5 + 5 + 5</math></u>         | = 15 |
| <u><math>5 + 5 + 3 + 3</math></u>     | = 16 |
| <u><math>5 + 5 + 5 + 5 - 3</math></u> | = 17 |
| <u><math>5 + 5 + 5 + 3</math></u>     | = 18 |
| <u><math>5 + 5 + 3 + 3 + 3</math></u> | = 19 |
| <u><math>5 + 5 + 5 + 5</math></u>     | = 20 |