



PERCENTAGE WORD PROBLEMS 6.3B (UK VERSION)

Find the answers to these percentage word problems.

Round your answers to the nearest whole number where appropriate.

- 1) Captain scores 120 points on Space Invaders. Tyger scores 15% more points than Captain. How many points does Tyger score?



- 2) Frazer is saving up for a new laptop. He has saved 45% of the amount so far. If the laptop costs £320, how much more does he need to save?



- 3) Sally sprints 300 metres in a minute. Quadra runs 16% further than Sally in the same time. How far did Quadra sprint?



- 4) Newton spends 15% of his free time each day reading. If he spends 33 minutes reading, how much free time does he have in hours and minutes?



- 5) There are some fish in an aquarium. 35% of the fish are angelfish. If there are 21 angelfish in the aquarium, how many fish altogether?



- 6) Sally buys a tin of chocolates. She gives a quarter of the chocolates to Tyger, 20% to Newton, and 15% to Frazer. She keeps the remaining 32 chocolates for herself. How many chocolates were in the tin?





PERCENTAGE WORD PROBLEMS 6.3B (UK VERSION) ANSWERS

Find the answers to these percentage word problems.

Round your answers to the nearest whole number where appropriate.

1) Captain scores 120 points on Space Invaders. Tyger scores 15% more points than Captain. How many points does Tyger score?

$$10\% \text{ of } 120 = 12.$$

$$5\% \text{ of } 120 = 6$$

$$\text{So } 15\% \text{ of } 120 = 12 + 6 = 18$$

$$\text{So Tyger scored } 120 + 18 = 138 \text{ points.}$$



2) Frazer is saving up for a new laptop. He has saved 45% of the amount so far. If the laptop costs £320, how much does more does he need to save?



He has saved 45% so he still needs to save 55% more.

$$55\% \text{ of } 320 = 0.55 \times 320 = 176$$

He still needs to save £176 more.

3) Sally sprints 300 metres in a minute. Quadra runs 16% further than Sally in the same time. How far did Quadra sprint?



$$16\% \text{ of } 300 = 0.16 \times 300 = 48$$

$$\text{Quadra sprints } 300 + 48 = 348 \text{ m.}$$

4) Newton spends 15% of his free time each day reading. If he spends 33 minutes reading, how much free time does he have in hours and minutes?



$$15\% \text{ of free time} = 33 \text{ minutes}$$

$$\text{So } 5\% \text{ of free time} = 33 \div 3 = 11 \text{ minutes}$$

$$\text{So } 100\% \text{ of free time} = 5\% \times 20$$

$$11 \text{ minutes} \times 20 = 220 \text{ minutes} = 3 \text{ hours } 40 \text{ minutes free time.}$$

5) There are some fish in an aquarium. 35% of the fish are angelfish. If there are 21 angelfish in the aquarium, how many fish altogether?



$$35\% \text{ of fish} = 21 \text{ angelfish}$$

$$\text{So } 5\% \text{ of fish} = 21 \div 3 = 7 \text{ fish}$$

$$100\% \text{ of fish} = 5\% \times 20$$

$$\text{So } 100\% \text{ of fish} = 7 \times 20 = 140 \text{ fish}$$

There are 140 fish in the aquarium.

6) Sally buys a tin of chocolates. She gives a quarter of the chocolates to Tyger, 20% to Newton, and 15% to Frazer. She keeps the remaining 32 chocolates for herself. How many chocolates were in the tin?



$$\text{One quarter} = 25\%.$$

$$25\% + 20\% + 15\% = 60\%.$$

$$\text{There are } 40\% \text{ of chocolates left} = 32 \text{ chocs.}$$

$$\text{So } 100\% \text{ of chocolates} = 40\% \times 2.5$$

$$= 32 \times 2.5 = 80 \text{ chocolates in the tin.}$$