

Name _____

Date _____



PERCENTAGE INCREASE / DECREASE /CHANGE PROBLEMS 2

Find the percentage increases, decreases and changes.

Give your answers correct to 1 decimal place where needed.

Working out

- 1) A film is 124 minutes long.
The uncut version is 15% longer.



How long is the uncut version?

- 2) Flash Harry bought a car for \$8,000.
He sold the car a month later for \$9,100.



What is his percentage profit?

- 3) Tyger goes spider hunting.
He collects 150 spiders in one day.
He collects 18% fewer spiders the next day.



How many spiders did he collect?

- 4) There are 1123 minutes of daylight
in Anchorage, Alaska in June.
There are 339 minutes of daylight
there in December.



What is the percentage change from June to December?

- 5) Sally puts \$12,000 in a savings account
which pays 3.5% interest per year.



How much money will she have at the end of a year?

- 6) Newton swims 2.4 miles in a week.
He swims 3.1 miles the following week.



What is the percentage change?

Name

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PERCENTAGE INCREASE / DECREASE /CHANGE PROBLEMS

SHEET 2 ANSWERS

Find the percentage increases, decreases and changes.

Give your answers correct to 1 decimal place where needed.

		Working out
1)	A film is 120 minutes long. The uncut version is 15% longer. 	$15\% \text{ of } 120 = 18$ $120 + 18 = 138$
How long is the uncut version?		138 minutes
2)	Flash Harry bought a car for \$8,000. He sold the car a month later for \$9,100. 	$9100 - 8000 = 1100$ $1100 \div 8000 = 0.1375$ $0.1375 \times 100 = 13.75$
What is his percentage profit?		13.8% profit
3)	Tyger goes spider hunting. He collects 150 spiders in one day. He catches 18% fewer spiders the next day. 	$18\% \text{ of } 150 = 27$ $150 - 27 = 123$
How many spiders did he catch?		He caught 123 spiders.
4)	There are 1123 minutes of daylight in Anchorage, Alaska in June. There are 339 minutes of daylight there in December. 	$339 - 1123 = -784$ $-784 \div 1123 = -0.6981..$ $-0.6981 \times 100 = -69.81$
What is the percentage change from June to December?		-69.8% (or a 69.8% decrease)
5)	Sally puts \$12,000 in a savings account which pays 3.5% interest per year. 	$3.5\% \text{ of } 12,000 = 420$ $12,000 + 420 = 12,420$
How much money will she have at the end of a year?		She will have \$12,420.
6)	Newton swims 2.4 miles in a week. He swims 3.1 miles the following week. 	$3.1 - 2.4 = 0.7$ $0.7 \div 2.4 = 0.2916...$ $0.2916 \times 100 = 29.16\%$
What is the percentage change?		29.2% increase