Name Date

PERCENTAGE INCREASE / DECREASE /CHANGE PROBLEMS 1

Find the percentage increases, decreases and changes.

Working out

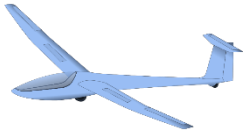
1) I buy a rare coin for $1,400.
I sell it a few years later for $1,820.

What is my percentage profit?

2) A car priced at $28,000 is reduced by 15% in a sale.

What is the new price?

3) A glider is flying at 2,000 ft.
It height increases by 35% as it rises in the thermals.



What is the new height?

4) Captain has a speaker with an output of 60 watts. He gets a new speaker which has a 12% more powerful.

What is the output of his new speaker?

5) Tyger can type at 36 words per minute.
After a touch typing course, he can type at 45 words per minute.

What is the percentage change?

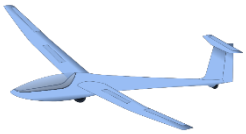
6) Quadra has a torch with a 50 lumen output.
Sally's torch is 65% brighter.

What is the output of Sally's torch?

Name Date

PERCENTAGE INCREASE / DECREASE /CHANGE PROBLEMS SHEET 1 ANSWERS

Find the percentage increases, decreases and changes.

			Working out
1)	I buy a rare coin for $1,400. I sell it a few years later for $1,820.		1820 – 1400 = 420 420 ÷ 1400 = 0.3 0.3 x 100 = 30%
	What is my percentage profit?		30% profit
2)	A car priced at $28,000 is reduced by 15% in a sale.		15% of $28,000 = $4,200 $28,000 - $4,200 = $23,800
	What is the new price?		*The new price is $23,800*
3)	A glider is flying at 2,000 ft. It height increases by 85% as it rises in the thermals.		85% of 2,000 = 1700 2,000 + 1,700 = 3,700
	What is the new height?		*3,700 ft*
4)	Captain has a speaker with an output of 60 watts. He gets a new speaker which is 45% more powerful.		45% of 60 = 27 60 + 27 = 87
	What is the output of his new speaker?		*The output is 87 watts*
5)	Tyger can type at 36 words per minute. After a touch typing course, he can type at 45 words per minute.		45 – 36 = 9 9 ÷ 36 = 0.25 0.25 x 100 = 25%
	What is the percentage change?		*25% increase*
6)	Quadra has a torch with a 50 lumen output. Sally's torch is 65% brighter.		65% of 50 = 32.5 50 + 32.5 = 82.5
	What is the output of Sally's torch?		*The output is 82.5 lumens.*