

- 1** The equation $C = 45 + 3d$ represents the relationship between total cost, C , in dollars, and the number of days, d .

Which of the following is true about this relationship?

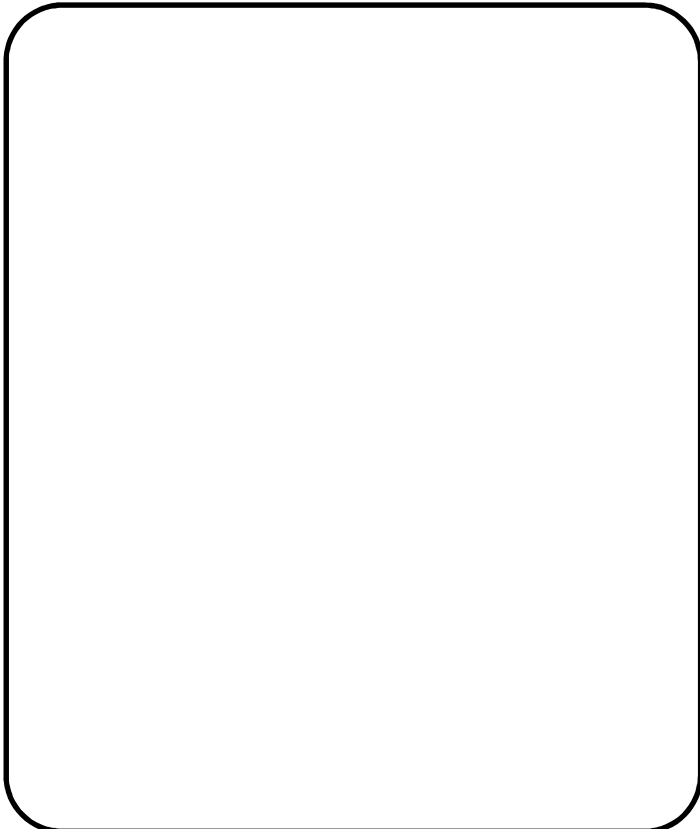
- a The total cost is \$48 per day.
- b The total cost is \$45 for 3 days.
- c The total cost is made up of a \$45 fixed fee and \$3 per day.
- d The total cost is made up of a \$3 fixed fee and \$45 per day.

- 2** The total cost of a cellphone plan, C , in dollars, is determined by the equation

$$C = 10 + 0.15n,$$

where n is the number of text messages sent.

If 25 text messages are sent, what is the total cost?



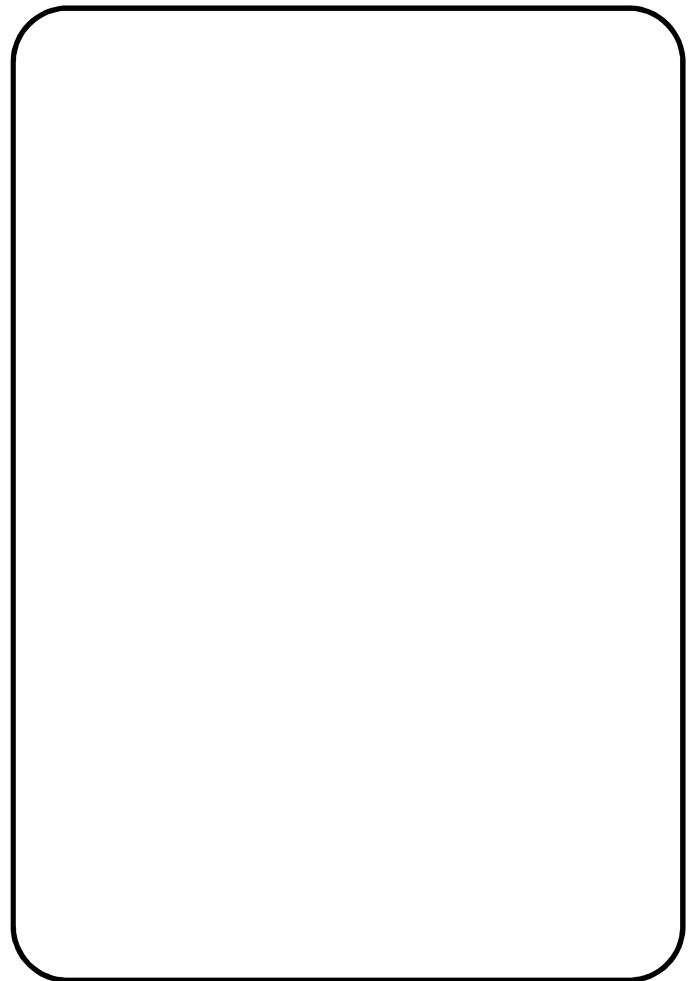
- 3** A bicycle has a regular price of \$175. It is on sale for 20% off.

Which of the following is closest to the total cost, including 13% tax?

- a \$140
- b \$158
- c \$163
- d \$168

- 4** A taxi charges a flat fee of \$3.75, plus \$1.50 per kilometre driven.

What is the total cost of a 10 km trip?



5

Sanjay makes \$20 per day plus \$8 for every magazine subscription he sells.

Which of the following tables shows data from the relationship between his total daily pay and the number of subscriptions he sells?

a

Number of subscriptions sold	Total daily pay (\$)
0	20
1	28
2	36
3	44
4	52

b

Number of subscriptions sold	Total daily pay (\$)
0	20
1	20
2	20
3	20
4	20

c

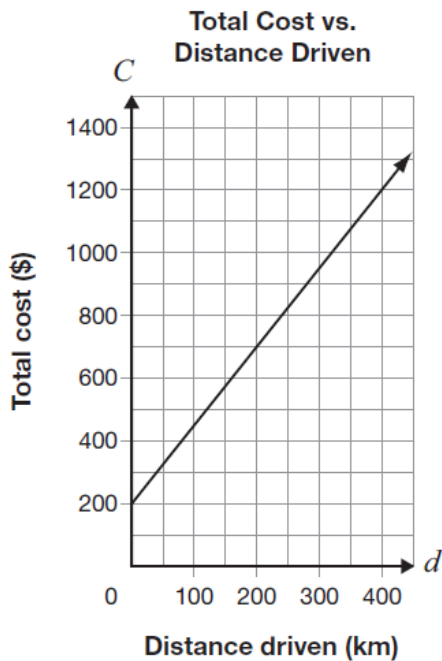
Number of subscriptions sold	Total daily pay (\$)
0	8
1	28
2	48
3	68
4	88

d

Number of subscriptions sold	Total daily pay (\$)
0	0
1	8
2	16
3	24
4	32

6

A limousine company charges customers according to the graph shown below.



What rate does the company charge per kilometre?

- 7** Amanda has a snow-shovelling business. Advertising costs her \$5 in total. She charges \$15 per driveway.

Which equation represents the relationship between her profit, P , and the number of driveways that she shovels, n ?

- a $P = 10n$
- b $P = 20n$
- c $P = 15n - 5$
- d $P = 5n - 15$

- 8** The table below shows the relationship between the cost to rent a bicycle, C , and the number of hours, n .

Number of hours, n	Rental cost, C (\$)
0	10
1	13
2	16
3	19

Which equation represents this relationship?

- a $C = 3n$
- b $C = 10n$
- c $C = 3 + 10n$
- d $C = 10 + 3n$

- 9** Each year, a school sends 50 students to a conference.

Last year, the cost was \$12.50 per student. This year, the cost per student has increased by 16%.

What is the total cost to send 50 students to the conference this year?

- 10** The total cost for printing a classified advertisement in a local newspaper is made up of a \$30 fee, plus \$0.10 per word.

Which equation below models the relationship where C is the total cost to place the advertisement and w is the number of words?

- a $C = 10 + 0.30w$
- b $C = 10 + 30w$
- c $C = 30 + 10w$
- d $C = 30 + 0.10w$

- 11 Last year's relationship between the total cost of producing yearbooks, C , and the number of yearbooks produced, n , is represented by the equation below.

$$C = 150 + 5n$$

This year, the initial cost is increased but the cost per yearbook is decreased.

Which graph could represent this year's relationship between total cost and the number of yearbooks?

