

ELITE MATHS
SIMPLIFY
ASSESSMENTS

YEAR 2020 v1

9 NUMERACY

CALCULATOR ALLOWED

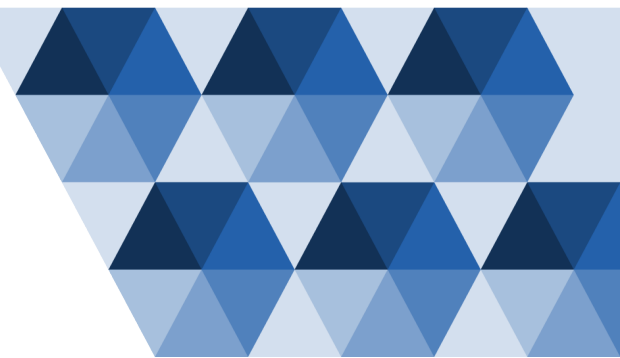


Use 2B or HB pencil **ONLY**



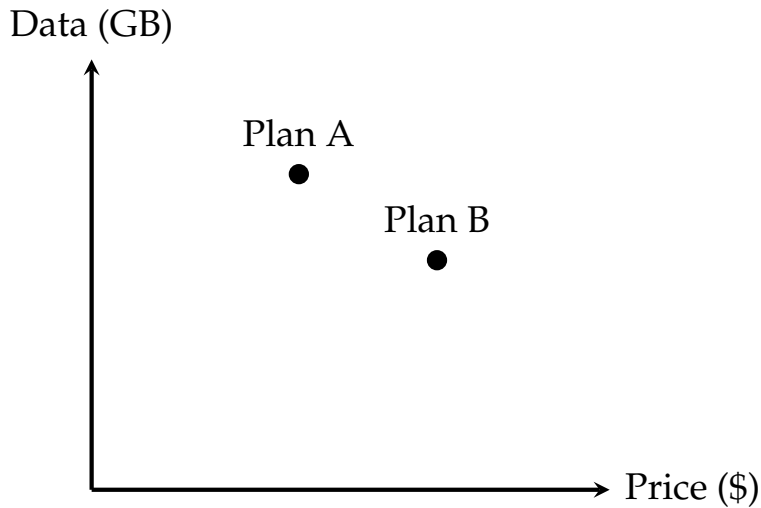
40_{min}

Time available for students to complete test: 40 minutes





- 4 An internet service provider offers two plans: Plan A and Plan B. The graph shows the price of the two plans and the amount of data they include.



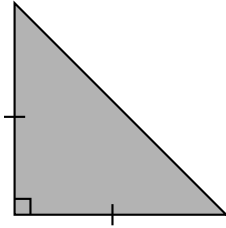
Which one of these statements is true?

- Plan B is more expensive but includes more data than Plan A.
- Plan A is more expensive but includes more data than Plan B.
- Plan B is more expensive but includes less data than Plan A.
- Plan A is less expensive but includes less data than Plan B.

- 5 If $x = 2$, what is the value of $\frac{3x - 2}{0.25x}$?

- 2 4 6 8
-

9



How many of the internal angles of the triangle are acute?

0

1

2

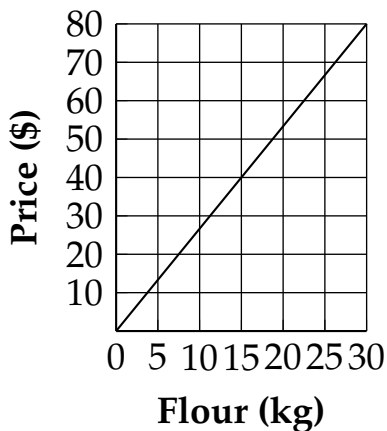
3

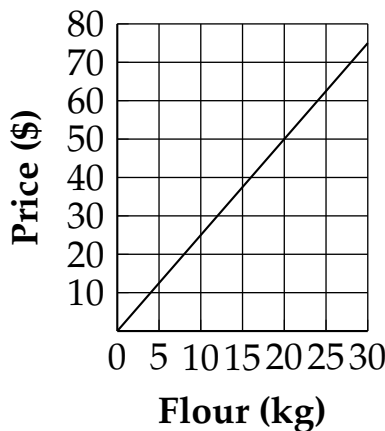
10

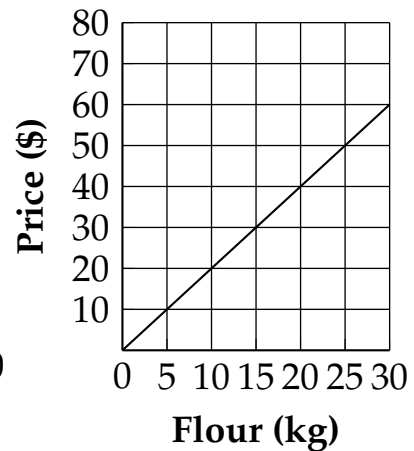
A supplier offers flour at a fixed rate.

The supplier charges 10 kilograms of flour for \$20, and 30 kilograms of flour for \$60.

Which graph could show the relationship between the amount of flour and its cost?







11

Which of these percentages is closest in value to $\frac{4}{9}$?

34%

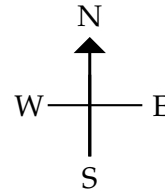
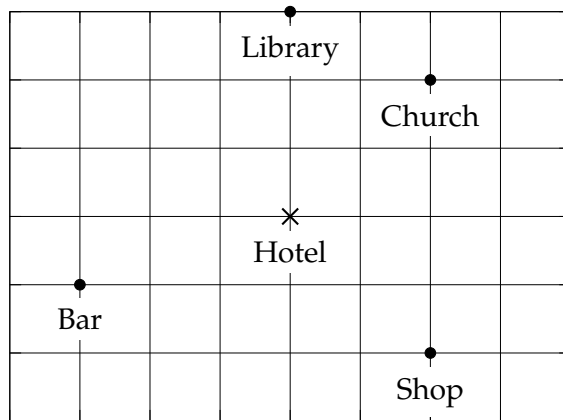
42%

44%

45%



26 A map of a town is shown below.



Duncan is at the Hotel facing the Library.

Which of the following will he be facing after he turns 315° anti-clockwise?

Library

Bar

Shop

Church

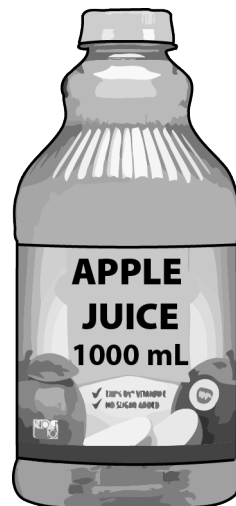
27 Which drink is the most expensive per litre?



\$5.50



\$6.00



\$9.50



\$4.75

- 27** Since $\frac{\$4.75}{0.15} \approx \31.7 , Vitamin is the most expensive drink per litre.



- 28** $\frac{\text{height}}{2.5} = \frac{4}{8}$, which gives height = $\frac{4}{8} \times 2.5 = 1.25$ m

- 29** $8 \times 15 \times 1.5 - 2 \times 2 \times 1.5 = 174 \text{ cm}^3$

- 30** $\frac{19 + 2 + 13}{37} = \frac{34}{37}$

- 31** Let x be the number of fifty-cent coins and let y be the number of twenty-cent coins.

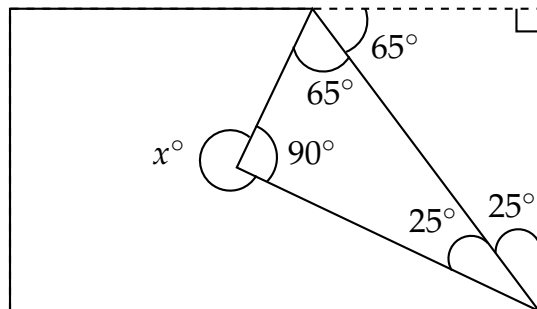
$$x + y = 15, 0.5x + 0.2y = 5.4$$

Solving these equations simultaneously gives $x = 8$ and $y = 7$.

Therefore, the total value of the twenty-cent coins is

$$7 \times \$0.20 = \$1.40.$$

- 32**



Some of the angles have been labelled on the diagram above. Since angles at a point sum to 360° , $x = 360 - 90 = 270$.