

MATHEMATICS PRACTICE TEST

PRACTICE QUESTIONS

Here are some practice examples to show you what the questions on the real test are like.

Practice Example 1

$$-10 + -3 - -4 + 5$$

A: 2

B: - 12

C: - 4

D: 16

E: None of these

Question 2

$$-96 \div -6 \div 8 =$$

A: 2

B: 12

C: - 12

D: - 2

E: None of these

Question 3

Jo bought a used car for \$6000 and paid 15% deposit. How much did he still have to pay?

A: \$900

B: \$5000

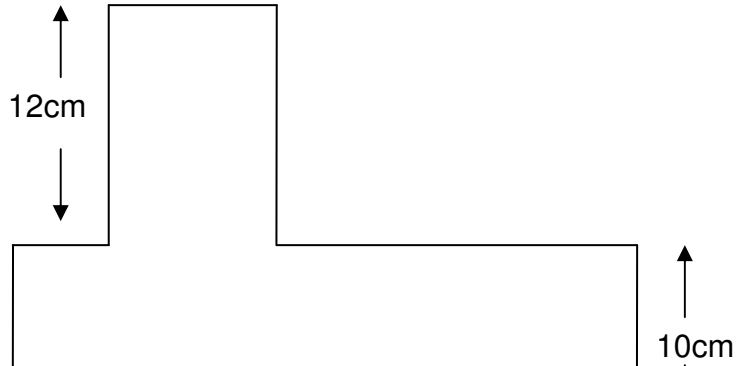
C: \$4500

D: \$5100

E: None of these

Question 7

The perimeter of the shape is



Question 10

If $2\frac{1}{3} : 4\frac{1}{3}$ then $7: \square \quad \square =$

A: 12

B: 13

C: $8\frac{2}{3}$

D: $6\frac{1}{3}$

E: None of these

Question 11

Concrete is made by mixing screenings cement and sand in the ratio 3:1:15. How much sand would be needed to make 125 tonnes of concrete?

A: 27 tonnes

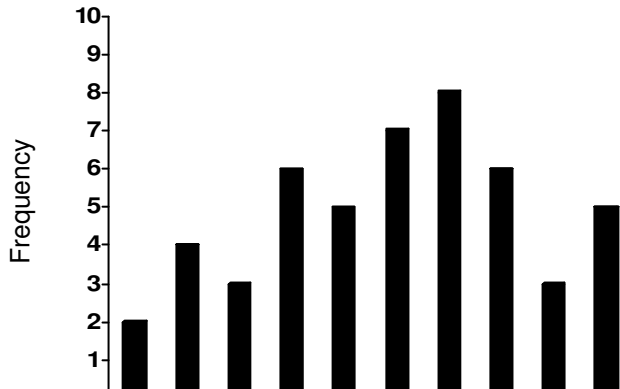
B: 33.75 tonnes

C: 45 tonnes

D: 75 tonnes

E: None of these

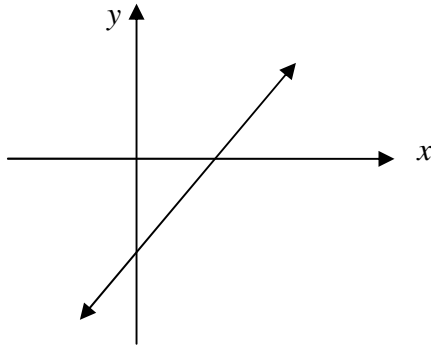
Use the following graph to answer questions 14 and 15



The graph shows the number of hours a year 8 group spent doing homework for one week.

Question 18

The y intercept of the graph could only be:



A: $(4,0)$

B: $(0,-3)$

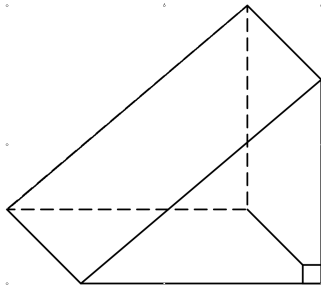
C: $(-4,0)$

D: $(-3,0)$

E: $(0,3)$

Question 21

Which option would make this solid?



Question 23

Simplify the surd $3\sqrt{56}$ completely

A: $12\sqrt{14}$

B: $5\sqrt{14}$

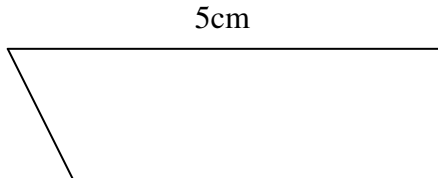
C: $6\sqrt{14}$

D: $6\sqrt{28}$

E: None of these

Question 24

The length of x equals



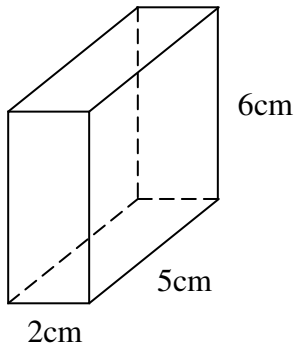
A: 6cm

B: $\sqrt{6}cm$

C: $5\sqrt{2}cm$

Question 27

If Density = Mass \div Volume, what is the Mass of the solid in the diagram if its Density is $1.2\text{gm} / \text{cm}^3$?



A: 50gm

B: 60gm

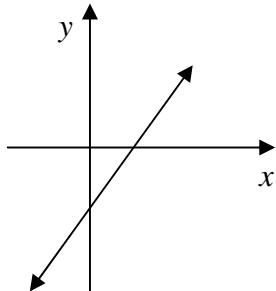
C: 72gm

D: 38.4gm

E: None of these

Question 32

Which equation could only be the equation of the graph?



A: $y = 3x + 2$

B: $y = -3x - 2$

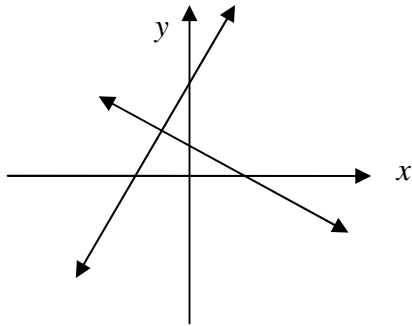
C: $y = 3x - 2$

D: $y = -3 + 2$

E: $y = -x - 2$

Question 35

The coordinates of the point of intersection for the two graphs could only be:



A: $(-1, 2)$

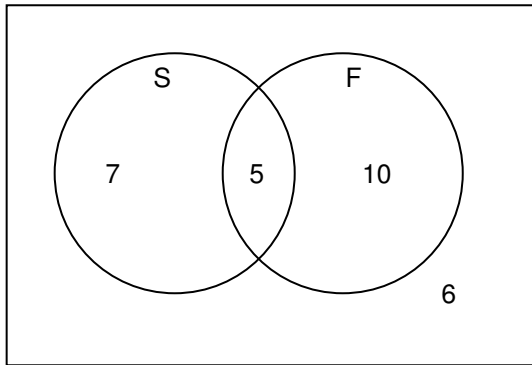
B: $(-1, -2)$

C: $(1, 2)$

D: $(1, -2)$

E: $(2, -1)$

Use the Venn diagram to answer questions 41, 42 and 43



The diagram shows a class of music students and instruments they learn.

S = Saxophone

F = Flute

Question 41

Question 46

Expand the brackets and simplify

$$(2\sqrt{5} - \sqrt{2})^2$$

A: $4\sqrt{5} + 2\sqrt{2}$

B: $12 - 4\sqrt{10}$

C: $8 - 4\sqrt{10}$

D: $2\sqrt{10} - 2$

E: None of these

Question 47

Rationalise and simplify $\frac{4\sqrt{5}}{\sqrt{3}}$

A: $\sqrt{6}$

B: $2\sqrt{6}$

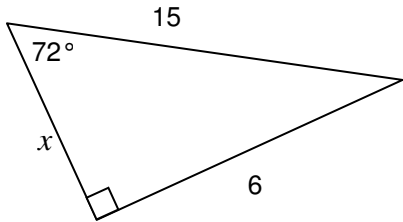
C: $\sqrt{6}$

D: $\sqrt{6}$

E: None of these

Question 02

The correct ratio to find x is:



A: $6 \cos 72^\circ$

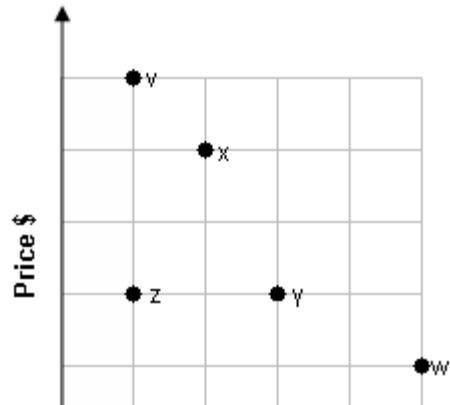
B: $6 \tan 72^\circ$

C: $15 \sin 18^\circ$

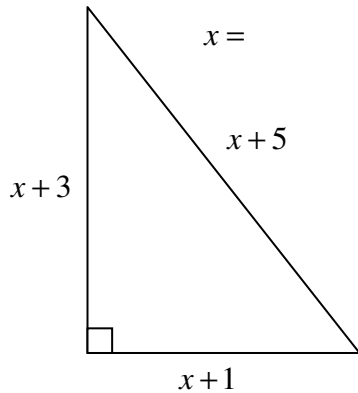
D: $15 \sin 72^\circ$

E: $15 \cos 18^\circ$

The graph shows the price paid and weight for bags of sugar bought at different shops.



Question 66



A: 4

B: 5

C: 6

D: 3

E: None of these