

16. From the set of numbers $\{2, 3^2, -8, 0, \sqrt{25}, 16\}$ write down

(a) the numbers greater than 7,

Answer: _____ [2]

(b) the prime numbers,

Answer: _____ [2]

(c) the numbers less than 1.

Answer: _____ [2]

17. *Smartly Dressed* produces made-to-order school uniforms. The chart below shows the amount of fabric required for various size of shirts.

SHIRTS	
SIZE	AMOUNT OF FABRIC (yards)
Small	$1\frac{2}{3}$
Medium	$2\frac{1}{2}$
Large	$2\frac{5}{6}$

(a) Calculate

(i) the amount of fabric needed to make 9 large shirts,

Answer: _____ yds [2]

(ii) the number of small shirts that can be produced from $18\frac{1}{3}$ yards of fabric.

Answer: _____ [2]

Mrs. Jones orders one small and two medium shirts.

(b) Calculate the amount of fabric required.

Answer: _____ yds [3]



18. Simplify

(a) $8 - 3(5 - 2y)$

Answer: _____ [3]

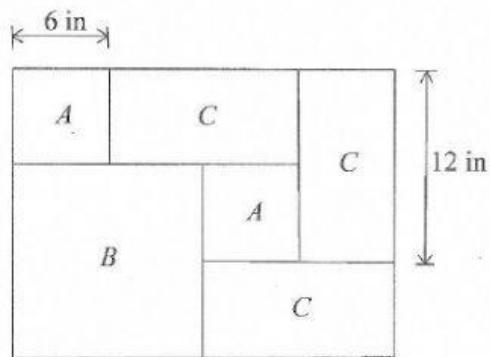
(b) $3p \times 2p^3 \times 5$

Answer: _____ [2]

(c) $24q^7 \div 3q^3$

Answer: _____ [2]

19. Mr. Jones tiles his foyer with three different size tiles: square tiles A and B and rectangular tiles C . This gives a basic pattern as shown below.



Calculate

(a) the area of tile A ,

Answer: _____ square ins [1]

(b) the area of tile B ,

Answer: _____ square ins [2]

(c) the area of tile C ,

Answer: _____ square ins [2]

(d) the area of the entire pattern.

Answer: _____ square ins [2]



20. Jeff wants to buy a drone for his photography project. The cash price is \$1294.00.

VAT is added at the rate of 7.5%.

(a) Calculate

(i) the VAT amount,

Answer: _____ [2]

(ii) the total cost of the drone.

Answer: _____ [2]

Jeff decides to buy the drone on a hire purchase plan at a total cost of \$1593.00, with monthly payments spread over $\frac{1}{2}$ a year.

(b) Calculate

(i) the amount of each monthly payment,

Answer: _____ [2]

(ii) the amount which can be saved if he had paid cash.

Answer: _____ [2]

