

13. Farmer Henry harvested $12\frac{2}{3}$ pound of potatoes and $8\frac{1}{4}$ pound of carrots last week.

(a) How many pounds of vegetables did he harvest altogether?

Answer: _____ [3]

(b) The following week he harvested 23 pounds of vegetables.

How many more pounds of vegetables did he harvest in the second week?

Answer: _____ [3]

13. The cash price of a stove is \$800. It can also be bought on hire purchase by paying a 20% deposit followed by 12 monthly payments of \$75 each. Calculate

(a) the amount of the deposit

Deposit Computation

_____ x _____

Answer: _____ [2]

(b) the total of the monthly payments

Answer: _____ [2]

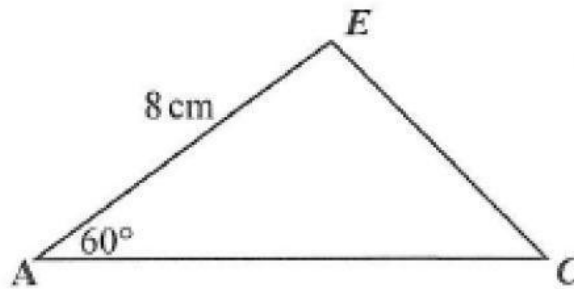
(c) the total cost of the stove using the hire purchase plan

Answer: _____ [2]

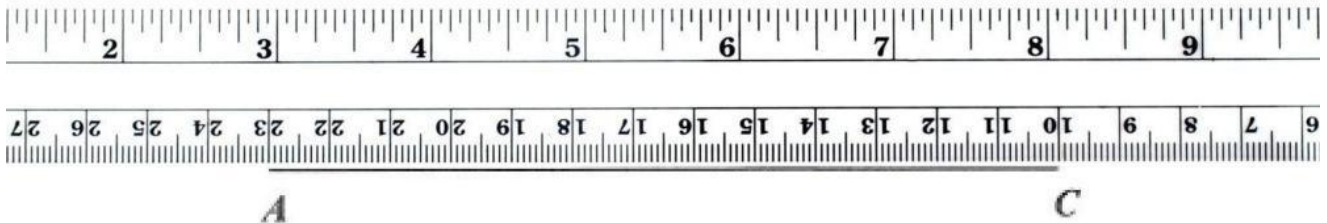
(d) how much money is saved by paying cash?

Answer: _____ [2]

13. Below is a sketch of triangle ACE .



CLICK ON THE LINK BELOW FOR VIDEO ON HOW TO DRAW TRIANGLE WITH TWO SIDES AND AN ANGLE GIVEN



- (a) Using ruler, compasses and pencils only, **construct** triangle ACE on the line AC above. [6]
- (b) Measure and state the size of angle ACE .

Answer: _____ $^\circ$ [1]

- (c) Name the type of triangle formed.

Answer: _____ [1]

13. (a) Simplify $3q + 12 + 2(3q - 5)$

Expression after Bracket Removal

Simplified Expression =

Answer: _____ [3]

(b) Solve for m :

$$3m - 5 = m + 8$$

Equation After Transposing for Like Terms

=

m =

Answer: _____ [3]

(c) Given that $x = 5$ and $y = 9$, evaluate $\frac{xy}{y-x}$

Value of = _____ = _____

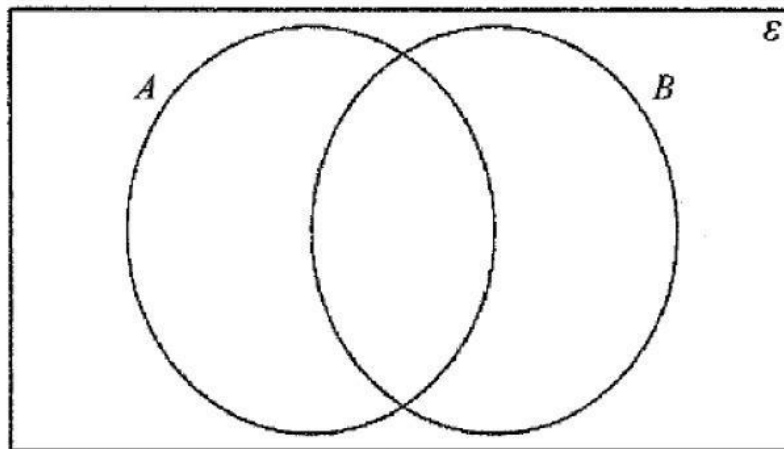
Answer: _____ [3]

13. $\mathcal{E} = \{\text{whole numbers from 1 to 10 inclusive}\}$

$$A = \{2, 4, 6, 8, 10\}$$

$$B = \{1, 2, 4, 8\}$$

(b) Using the information above complete the Venn Diagram. [4]



(a) List the members of set

(i) $A \cup B = \{ \text{_____} \}$ [2]

(ii) $A \cap B = \{ \text{_____} \}$ [2]

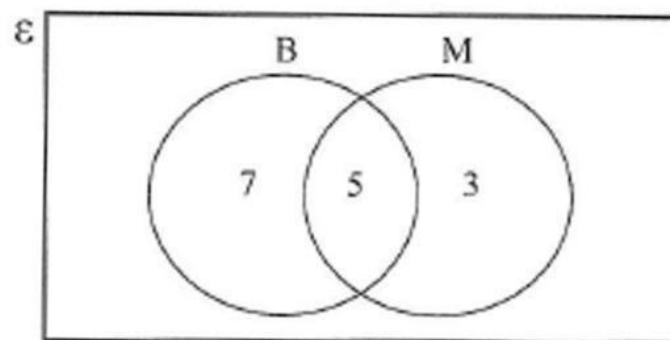
(iii) $(A \cup B)' = \{ \text{_____} \}$ [2]

13. Calculate: $\frac{2}{5} + \frac{3}{4} \times \frac{2}{9}$

Answer: _____ [5]

13. The Venn diagram below shows the number of students in a class who are on a basketball team and/or are in the Math Club.

Study the diagram and answer the questions that follow.



- (a) 4 students were on neither team, place the 4 in the correct region of the Venn diagram [1]

- (b) Calculate the total number of students on the basketball team?

Answer: _____ [1]

- (c) State the number of students that are in the Math Club ONLY.

Answer: _____ [1]

- (d) Write down the number of students that are in the Math Club and are on the basketball team?

Answer: _____ [1]

- (e) Calculate the number of students in the class?

Answer: _____ [2]