



To be completed on loose-leaf paper.

Due date: _____

1. Evaluate each of the following.

(a) $\frac{3}{5} + \frac{2}{10}$

(b) $\frac{7}{8} + \frac{5}{6}$

(c) $2\frac{2}{15} - 1\frac{3}{10}$

(d) $2\frac{1}{9} - 1\frac{5}{6}$

(e) $\frac{6}{7} \times \frac{2}{3}$

(f) $2\frac{1}{4} \times 2\frac{2}{3}$

(g) $\frac{1}{4} \div \frac{1}{2}$

2. Find the value of x in each of the following.

(a) $\frac{x}{30} = \frac{14}{15}$

(b) $\frac{3}{5} = \frac{x}{25}$

(c) $\frac{15}{16} = \frac{60}{x}$

(d) $\frac{x}{6} = 2\frac{1}{3}$

3. Substitute the given values into each of the following to determine the value of the unknown pronumeral.

(a) $m = \frac{a+b}{5}$; $a = 8$ and $b = -3$

(b) $a = \pi r^2$; $\pi = 3.14$ and $r = 3$

(c) $c^2 = a^2 + b^2$; $a = 4$ and $b = 3$

4. Simplify:

(a) $14x - 5x$

(b) $12p - 3q + 6p - 2q$

(c) $4 + 2a - 3 - 2d$

5. Write each of the following as a percentage.

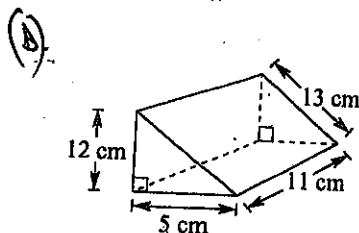
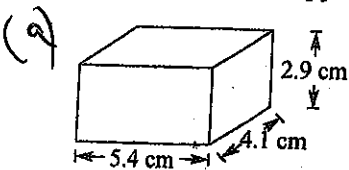
(a) 0.07

(b) 1.75

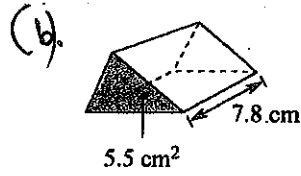
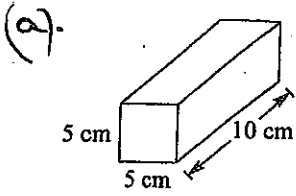
(c) $\frac{1}{8}$

(d) 3 out of 50

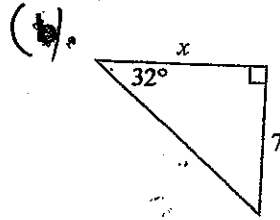
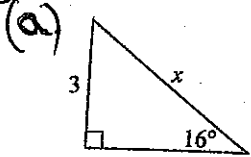
6. Find the total surface area of each of the following solids. Give your answer to two decimal places where appropriate.



7. Find the volume of each of the following objects. Give your answer to two decimal places where appropriate.



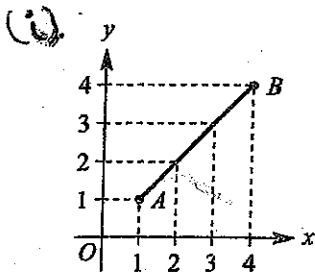
8. Find the value of x correct to two decimal places.



(c) $\cos 25^\circ = \frac{2}{x}$

(d) $\tan 30^\circ = \frac{x}{3}$

9. For the line connecting the two points A and B in each of the following.



(ii)

$A(-5, 6), B(0, -4)$

(a) Find the gradient.

(b) Find the equation.

(c) State the y -intercept.