

Warm-Up

BEDMAS

use exponent Rules

Evaluate

$$1) \frac{3^2(5^0 + 2 + 2^2)}{2(5 + 4^2)}$$

$$\frac{9(1 + 2 + 4)}{2(5 + 16)}$$

$$\frac{9(7)}{2(21)} = \frac{63}{42} = \frac{21}{14} = \frac{3}{2}$$

Simplify then Evaluate

$$2. \frac{(-4)^3 \times (-4)^4}{(-4)^2 \times (-4)^3} + 3^4$$

$$\frac{(-4)^7}{(-4)^5} + 3^4$$

$$(-4)^2 + 3^4$$

$$16 + 81$$

$$97$$

Exam Review Unit 1

Perfect Squares

Surface Area

Which of the following are perfect squares?

A. 1.69 $\frac{169}{100}$ $\leftarrow 13 \times 13$ $\leftarrow 10 \times 10$ yes

B. 0.9 $\frac{9}{10} = \frac{90}{100}$ \leftarrow NO $\leftarrow 10 \times 10$ NO

C. 81 9×9 yes

D. 12.1 $\frac{121}{10} = \frac{1210}{100}$

calculator

$\sqrt{12.1} = 3.4785\dots$ NO

Find the square root of the following:

Leave as a
fraction

$$a) \sqrt{\frac{81}{100}} = \frac{9}{10}$$

$$b) \sqrt{\frac{121}{25}} = \frac{11}{5}$$

$$c) \sqrt{0.09} = \sqrt{\frac{9}{100}} = \frac{3}{10}$$

Find square root \rightarrow [calculator]

$$a) \sqrt{12.25}$$

3.5

$$b) \sqrt{16.81}$$

4.1

$$c) \sqrt{\frac{841}{25}}$$

$$\sqrt{33.64}$$

5.8

Estimate the following: **Benchmarks**

$$a) \sqrt{42}$$

$$\sqrt{36}$$

6

$$\sqrt{49}$$

7

$$b) \sqrt{0.63}$$

$$\sqrt{\frac{63}{100}}$$

$$\sqrt{\frac{49}{100}}$$

$$\frac{7}{10}$$

$$\sqrt{\frac{64}{100}}$$

$$\frac{8}{10}$$

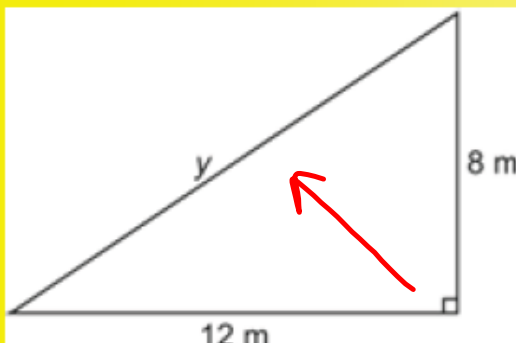
$$\sqrt{\frac{10}{17}}$$

$$\sqrt{\frac{9}{16}}$$

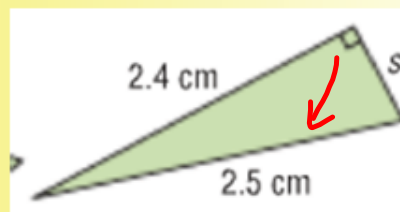
$$\frac{3}{4}$$

Calculate the unknown side

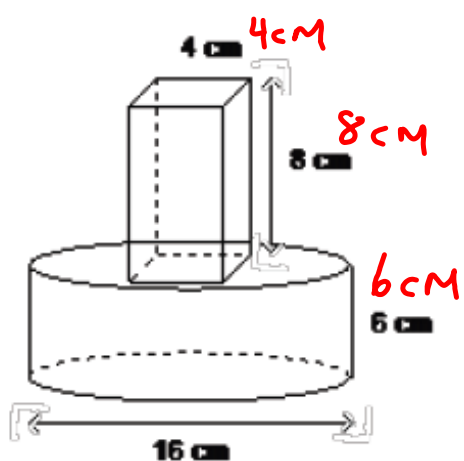
$$c^2 = a^2 + b^2$$



$$\begin{aligned} c^2 &= a^2 + b^2 \\ c^2 &= 12^2 + 8^2 \\ c^2 &= 144 + 64 \\ \sqrt{c^2} &= \sqrt{208} \\ c &= 14.4 \text{ m} \end{aligned}$$



$$\begin{aligned} c^2 &= a^2 + b^2 \\ 2.5^2 &= a^2 + 2.4^2 \\ 6.25 &= a^2 + 5.76 \\ \sqrt{a^2} &= \sqrt{0.49} \\ a &= 0.7 \end{aligned}$$



$$SA = 2\pi r^2 + 2\pi r h$$

F/B

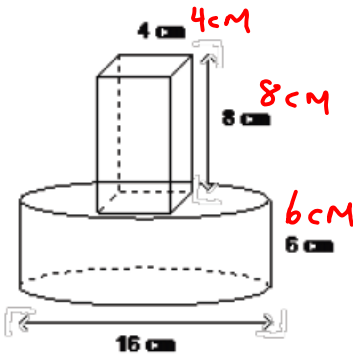
x2

T/B

x2

Sides

x2

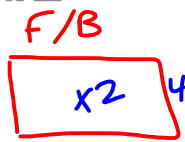


SA cylinder

$$2\pi r^2 + 2\pi r h$$

$$2\pi(8)^2 + \pi(8)(6)$$

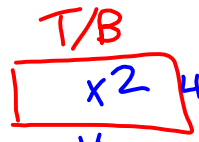
$$\frac{401.92 + 301.44}{703.36 \text{ cm}^2}$$



$$A = bh$$

$$= 8 \times 4$$

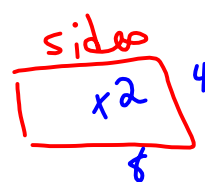
$$= 32$$



$$A = bh$$

$$= 4 \times 4$$

$$= 16$$



$$A = bh$$

$$= 8 \times 4$$

$$= 32$$

160

Ques
1-22
for Friday

$$703.36 + 160 - 32 =$$

$$831.36 \text{ cm}^2$$

Attachments

Formula_Sheet_Ultimate_Final_Copy[1].doc