

Review for Test on 8/30/2024

$$1) \sqrt[3]{\frac{343}{125}} = \frac{\sqrt[3]{343}}{\sqrt[3]{125}} = \frac{7}{5}$$

$$2) \sqrt[3]{\frac{27}{64}} = \frac{\sqrt[3]{27}}{\sqrt[3]{64}} = \frac{3}{4}$$

3) Complete the following

$$\begin{array}{r} \text{Solve } 3 = 4 + 15 \\ -15 \quad \quad -15 \\ \hline -12 = 4 \end{array}$$

What property was used to solve?

Ans: Subtraction

4) Solve the equation

$$\begin{array}{r} \frac{x}{5} = -11 \\ \rightarrow x = -55 \end{array}$$

What property was used to solve?

Ans: Multiplication

5) Solve:

$$\frac{-6}{1} = \frac{(x + 7)}{-5}$$

$$\rightarrow 30 = x + 7$$

$$\begin{array}{r} -7 \\ \hline 23 = x \end{array}$$

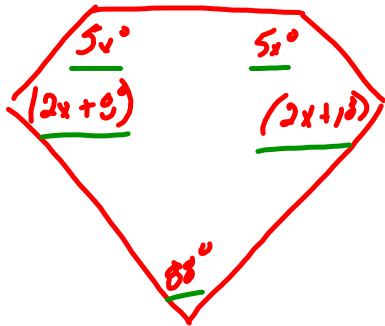
6) Solve:

$$\frac{15}{1} = \frac{(2x - 3)}{2}$$

$$\rightarrow 30 = 2x - 3$$

$$\begin{array}{r} +3 \\ \hline 33 = 2x \\ \frac{33}{2} = \frac{2x}{2} \\ \frac{33}{2} = x \end{array}$$

7)



$$540^\circ = \underline{5x^\circ} + \underline{5x^\circ} + \underline{(2x+9)^\circ} + \underline{(2x+10)^\circ} + \underline{88^\circ}$$

$$540 = 14x + 106$$

$$\begin{array}{r} -106 \\ \hline \end{array}$$

$$\underline{434} = \underline{14x}$$

$$\begin{array}{r} 14 \\ 14 \end{array}$$

$$31 = x$$

8) Solve:

$$7 - (3x + 1) = 21$$
$$\underline{7} - 3x - \underline{1} = 21$$
$$\underline{-3x + 6} = 21$$

$$\underline{-3x} = \underline{-15}$$
$$\underline{-3} \quad \underline{-3}$$
$$x = -5$$

9) $6 - (4d - 2) = 7$

$$6 - 4d + 2 = 7$$
$$\underline{-4d + 8} = 7$$

$$\underline{-4d} = \underline{-1}$$
$$\underline{-4} \quad \underline{-4}$$
$$d = \frac{1}{4}$$

10) 6'6" you 4' Shadow

x Lamppost 16' Lamppost Shadow

$$\frac{78''}{x''} = \frac{48''}{192''}$$

$$\rightarrow \frac{14,976''}{48''} = \frac{48''x}{48''}$$

$$312'' = x$$

$$\frac{26'}{1} = x$$