

12-12-19 6th Geo

$$\frac{4}{8} = \frac{3}{6} = \frac{2}{4} = \frac{1}{2} \quad \text{Means-Extremes}$$

$$4:8 = 3:6$$

Means
Extremes

$$\textcircled{1} \quad \frac{12}{9} = \frac{4}{x}$$

$$12x = 36$$
$$x = 3$$

$$\textcircled{2} \quad \frac{n+2}{3} = \frac{n+4}{5}$$

$$5(n+2) = 3(n+4)$$

$$5n+10 = 3n+12$$

$$\begin{array}{r} -3n \quad -3n \\ \hline \end{array}$$

$$2n+10 = 12$$

$$\begin{array}{r} -10 \quad -10 \\ \hline \end{array}$$

$$2n = 2$$

$$n = 1$$

$$\textcircled{3} \quad \frac{3n-1}{10} = \frac{n+2}{8}$$

$$10(n+2) = 8(3n-1)$$

$$10n+20 = 24n-8$$

$$\begin{array}{r} -10n \quad -10n \\ \hline \end{array}$$

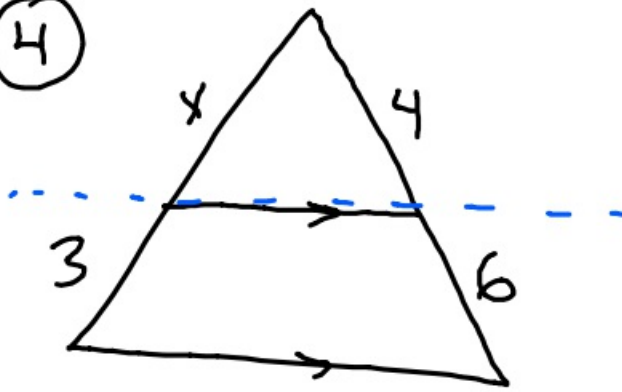
$$20 = 14n - 8$$

$$\begin{array}{r} +8 \quad +8 \\ \hline \end{array}$$

$$28 = 14n$$

$$n = 2$$

④

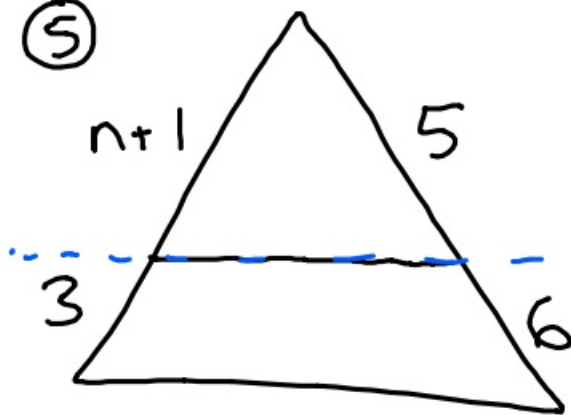


$$\frac{x}{3} = \frac{4}{6}$$

$$6x = 12$$

$$x = 2$$

⑤



$$\frac{n+1}{3} = \frac{5}{6}$$

$$6(n+1) = 15$$

$$6n + 6 = 15$$

$$\begin{array}{r} 6n + 6 = 15 \\ -6 \quad -6 \\ \hline \end{array}$$

$$6n = 9$$

$$n = 1\frac{1}{2}$$

12-12-19 7th Geo

$$\frac{4}{8} = \frac{3}{6} \quad \frac{6}{8} = \frac{3}{4} \quad \begin{array}{l} \text{Means} \\ \text{Extremes} \end{array}$$

$$6:8 = 3:4$$

Means

Extremes

①

$$\frac{n}{9} = \frac{4}{6}$$
$$\frac{6n}{6} = \frac{36}{6}$$
$$n = 6$$

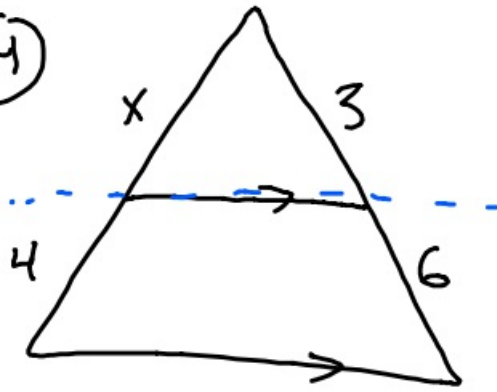
②

$$\frac{n+4}{5} = \frac{n+2}{3}$$
$$5(n+2) = 3(n+4)$$
$$5n+10 = 3n+12$$
$$\begin{array}{r} -3n \quad -3n \\ \hline 2n+10 = 12 \\ \quad -10 \quad -10 \\ \hline 2n = 2 \end{array} \quad n = 1$$

③

$$\frac{3n-1}{4} = \frac{2n+3}{2}$$
$$4(2n+3) = 2(3n-1)$$
$$8n+12 = 6n-2$$
$$\begin{array}{r} -6n \quad -6n \\ \hline 2n+12 = -2 \\ \quad -12 \quad -12 \\ \hline 2n = -14 \\ \quad \quad \quad n = -7 \end{array}$$

④

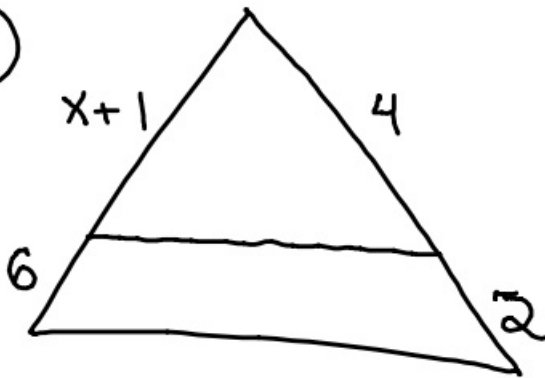


$$\frac{x}{4} = \frac{3}{6}$$

$$6x = 12$$

$$x = 2$$

⑤



$$\frac{x+1}{6} = \frac{4}{2}$$

$$2(x+1) = 24$$

$$2x + 2 = 24$$

$$\begin{array}{r} 2x + 2 = 24 \\ -2 \quad -2 \\ \hline 2x = 22 \end{array}$$

$$2x = 22$$

$$x = 11$$