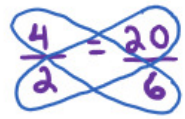
Kuta Software - Infinite Pre-Algebra Name_____

Proportions

Date_____ Period____

State if each pair of ratios forms a proportion.

1) $\frac{4}{2}$ and $\frac{20}{6}$



$4 \cdot 6 = 20 \cdot 2$

$24 \neq 40$

∴ Pair does not form a proportion!

2) $\frac{3}{2}$ and $\frac{18}{8}$

3) $\frac{4}{3}$ and $\frac{16}{12}$

4) $\frac{4}{3}$ and $\frac{8}{6}$

5) $\frac{12}{24}$ and $\frac{3}{4}$

6) $\frac{6}{9}$ and $\frac{2}{3}$

Solve each proportion. Leave as a fraction, in simplest form.

7) $\frac{10}{k} = \frac{8}{4}$

8) $\frac{m}{10} = \frac{10}{3}$

9) $\frac{2}{x} = \frac{7}{9}$

10) $\frac{3}{x} = \frac{7}{10}$

11) $\frac{4}{9} = \frac{2}{x}$

12) $\frac{6}{a} = \frac{3}{8}$

13) $\frac{8n}{8} = \frac{8}{3}$

14) $\frac{7}{9} = \frac{a}{5}$

15) $\frac{p}{8} = \frac{13}{2}$

16) $\frac{3}{13} = \frac{v}{3}$

17) $\frac{10}{12} = \frac{2}{n}$

18) $\frac{11}{10} = \frac{r}{11}$

19) $\frac{x}{9} = \frac{7}{14}$

20) $\frac{a}{10} = \frac{11}{14}$

21) $\frac{v}{12} = \frac{10}{2}$

22) $\frac{6}{14} = \frac{5}{n}$

State if each pair of ratios forms a proportion.

1) $\frac{4}{2}$ and $\frac{20}{6}$

No

2) $\frac{3}{2}$ and $\frac{18}{8}$

No

3) $\frac{4}{3}$ and $\frac{16}{12}$

Yes

4) $\frac{4}{3}$ and $\frac{8}{6}$

Yes

5) $\frac{12}{24}$ and $\frac{3}{4}$

No

6) $\frac{6}{9}$ and $\frac{2}{3}$

Yes

Solve each proportion.

7) $\frac{10}{k} = \frac{8}{4}$

{5}

8) $\frac{m}{10} = \frac{10}{3}$

{33.33} $m = \frac{100}{3}$

9) $\frac{2}{x} = \frac{7}{9}$

{2.57}

$x = \frac{18}{7}$

10) $\frac{3}{x} = \frac{7}{10}$

{4.28}

$x = \frac{30}{7}$

11) $\frac{4}{9}=\frac{2}{x}$

{4.5}

$x=\frac{18}{4}$

$x=\frac{9}{2}$

12) $\frac{6}{a}=\frac{3}{8}$

{16}

13) $\frac{8n}{8}=\frac{8}{3}$

{2.66}

$n=\frac{64}{24}$

$n=\frac{8}{3}$

14) $\frac{7}{9}=\frac{a}{5}$

{3.88}

$a=\frac{35}{9}$

15) $\frac{p}{8}=\frac{13}{2}$

{52}

16) $\frac{3}{13}=\frac{v}{3}$

{0.69}

$v=\frac{9}{13}$

17) $\frac{10}{12}=\frac{2}{n}$

{2.4}

$n=\frac{24}{10}$

$n=\frac{12}{5}$

18) $\frac{11}{10}=\frac{r}{11}$

{12.1}

$r=\frac{121}{10}$

19) $\frac{x}{9}=\frac{7}{14}$

{4.5}

$x=\frac{63}{14}$

$x=\frac{9}{2}$

20) $\frac{a}{10}=\frac{11}{14}$

{7.85}

$a=\frac{110}{14}$

$a=\frac{55}{7}$

21) $\frac{v}{12}=\frac{10}{2}$

{60}

22) $\frac{6}{14}=\frac{5}{n}$

{11.66}

$n=\frac{70}{6}$

$n=\frac{35}{3}$