

$$\frac{2}{\sqrt{2}} = \frac{\sqrt{2} \cdot \sqrt{2}}{\sqrt{2}} = \sqrt{2}$$

$$3 \cdot \frac{5}{15} = \frac{15}{3 \cdot 15}$$

$$\frac{3}{\frac{1}{2}} \quad \frac{6}{2} \quad \text{||||}$$

$$\text{||||} = 6$$

$$\frac{3 \left(\frac{3}{2} \right)}{\frac{3}{2}}$$

$$\text{||||} \frac{3}{2} \quad \text{|||}$$

$$4 \frac{1}{2}$$

$$\frac{\sqrt{2}}{2}$$

$$\frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

Prove $2^6 \cdot 4^3 = 8^4$

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 4 \cdot 4 \cdot 4$$

$$\frac{2}{\sqrt{2}} \cdot \frac{\sqrt{2} \cdot \sqrt{2}}{\sqrt{2}} = \sqrt{2}$$

$$\sqrt{7} = 7^{\frac{1}{2}}$$

$$\frac{5\sqrt{2}}{\sqrt{5}} = \frac{\sqrt{5} \cdot \sqrt{5} \cdot \sqrt{2}}{\sqrt{5}} = \sqrt{10}$$

$$2^3 \cdot 4^2 = 2^{\square}$$

$$2 \cdot 2 \cdot 2 \cdot 4 \cdot 4$$

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 2^7$$

Prove $2^6 \cdot 4^3 = 8^4$

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 4 \cdot 4 \cdot 4$$

$$\underbrace{2 \cdot 2 \cdot 2}_{=8} \cdot \underbrace{2 \cdot 2 \cdot 2}_{=8} \cdot \underbrace{2 \cdot 2 \cdot 2}_{=8} \cdot 2 \cdot 2 \cdot 2$$

$$\frac{3}{\frac{1}{2}} \quad \frac{6}{2} \quad \text{○○○○}$$

$$\text{○○○○} = 6$$

$$\frac{4}{\frac{1}{3}} = 12 \quad \text{○○○○} \quad \text{○○○○}$$

$$\frac{3}{\frac{2}{3}} \quad \text{○○○○} \quad |$$

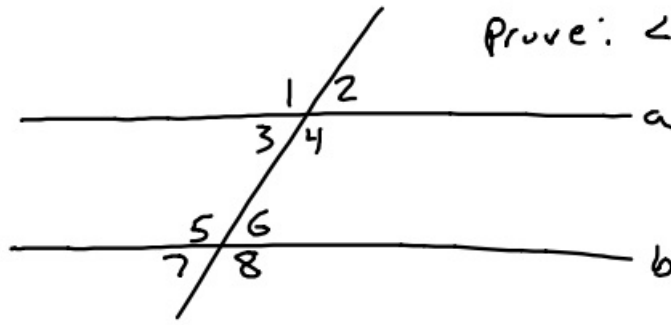
$$4\frac{1}{2}$$

$$\frac{3 \cdot 3}{\frac{1}{2}} = \frac{9}{\frac{1}{2}} = 4\frac{1}{2}$$

~~○○○○~~

$$\frac{3 \cdot 3}{\frac{1}{2}} = 6$$

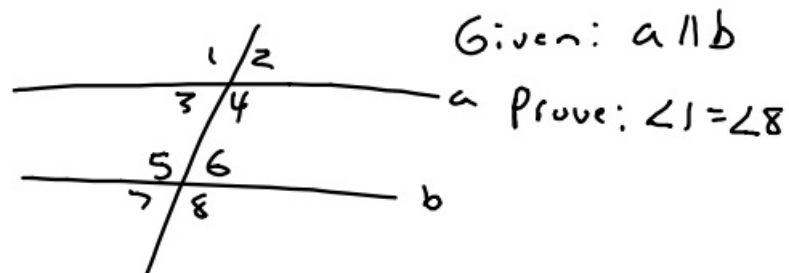
Given: $a \parallel b$
 Prove: $\angle 1 = \angle 8$



Statement	Justification
① $a \parallel b$	① Given
② $\angle 1 = \angle 5$	② Corr. \angle 's are = in parallel lines
③ $\angle 5 = \angle 8$	③ Vertical \angle 's are =
④ $\angle 1 = \angle 8$	④ Transitive Prop. (lines 2, 3)

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Same thing a different way



Given: $a \parallel b$
 Prove: $\angle 1 = \angle 8$

Statement	Justification
① $a \parallel b$	① Given
② $\angle 1 = \angle 4$	② Vertical \angle 's are =
③ $\angle 4 = \angle 8$	③ Corr. \angle 's are = in \parallel lines
④ $\angle 1 = \angle 8$	④ Transitive Prop.

$$\frac{2}{\sqrt{2}} = \frac{\sqrt{2} \cdot \sqrt{2}}{\sqrt{2}} = \sqrt{2}$$

$$\frac{5\sqrt{2}}{\sqrt{5}} = \frac{\sqrt{5} \cdot \sqrt{5} \cdot \sqrt{2}}{\sqrt{5}} = \sqrt{10}$$

$$\frac{3}{\frac{1}{2}} = \frac{6}{2} = \text{3 circles} = 6$$

$$\frac{4}{\frac{1}{3}} = 12 = \text{4 groups of 3 circles} = 12$$

$$\frac{3}{\frac{2}{3}} = \frac{9}{2} = 4\frac{1}{2}$$

$$4\frac{1}{2}$$



$$\frac{3\frac{3}{2}}{\frac{3}{2}} = \frac{9}{2} = 4\frac{1}{2}$$

$$\frac{3\frac{3}{2}}{\frac{1}{2}} = 3 \cdot 2 = 6$$

$$\frac{n+8}{n+6} \cdot \frac{n+3}{n+4}$$

~~Handwritten scribbles below the fraction.~~

$$2^5 \cdot 4^3 = 2^{\boxed{11}}$$

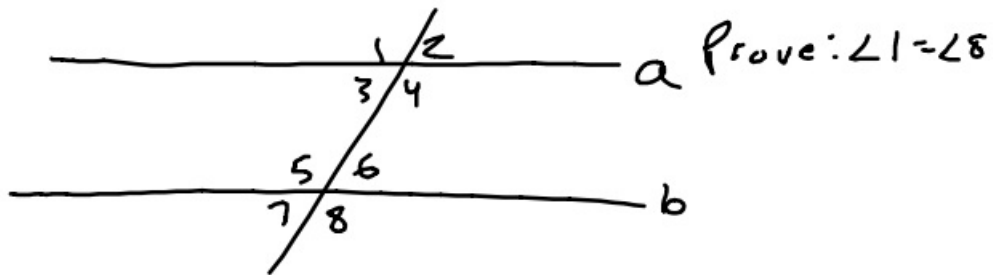
$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 4 \cdot 4 \cdot 4$$

$$2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$$

$$2^6 \cdot 4^3 = 8^4$$

$$\underbrace{(2 \cdot 2 \cdot 2)}_8 \cdot \underbrace{(2 \cdot 2 \cdot 2 \cdot 4 \cdot 4 \cdot 4)}_8 = 8^4$$

Given: $a \parallel b$

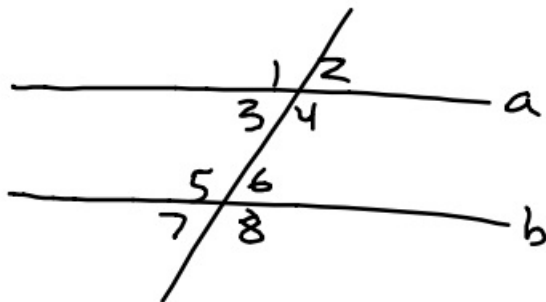


Statement	Justification
① $a \parallel b$	① Given
② $\angle 1 = \angle 4$	② Vertical \angle 's are =
③ $\angle 4 = \angle 8$	③ Corr. \angle 's are = in parallel lines.
④ $\angle 1 = \angle 8$	④ Transitive Prop.

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OR

Given: $a \parallel b$
Prove: $\angle 1 = \angle 8$



Statement	Justification
① $a \parallel b$	① Given
② $\angle 1 = \angle 5$	② Corr. \angle 's are = in parallel lines
③ $\angle 5 = \angle 8$	③ Vert. \angle 's =
④ $\angle 1 = \angle 8$	④ Transitive P.

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