$\triangle ABC$ $\sim$ $\triangle XYZ$

$$\frac{10}{20} = \frac{5}{t} \quad \boxed{10 \text{ in.}}$$

$$\frac{SF}{\frac{2}{1}}$$

enlarge

$$\frac{SF}{\frac{1}{2}}$$

reduce

14.)

8.8 m

8800 mm

6.4 mm
6400 mm

8.8 m = _____ mm

$$\frac{8.8 \, m}{1} \times \frac{1000 \, mm}{1 \, m} =$$
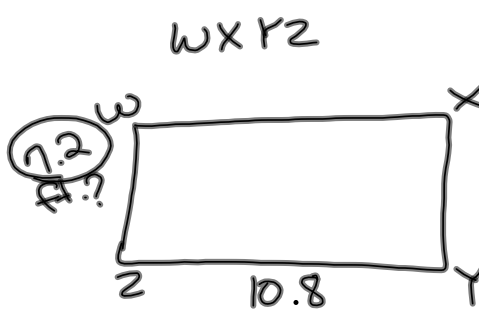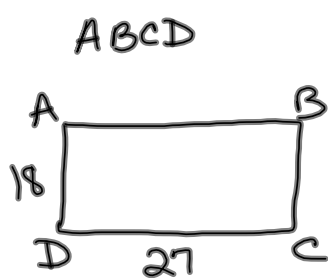
Reduction
SF: 400

16 mm

22 mm

SF

$$\frac{8800}{1} \times \frac{1}{400} = 22 \, mm$$

$$\frac{6400}{1} \times \frac{1}{400} = 16 \, 000 \, mm$$

$$\frac{400}{1} \quad \left(\frac{1}{400}\right)$$

$$\frac{1 \, m}{1000 \, mm}$$

$$\left(\frac{1000 \, mm}{1 \, m}\right)$$

10.)

ABCD   WXYZ

A _____ B   W _____ X
| | | |
18 | | |
| | | |
D____27_____ C   Z____10.8____ Y

7.2
?
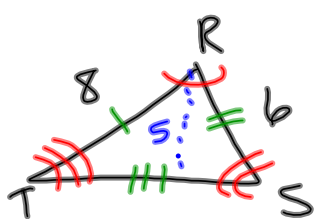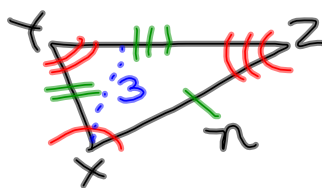
$$\frac{27}{10.8} = \frac{18}{?}$$ $$\frac{18}{27} = \frac{?}{10.8}$$

24.)

$\triangle$ RST

$\triangle$ XYZ

$$\frac{5}{8} = \frac{3}{n}$$

$$\frac{5}{3} = \frac{8}{n}$$

$\boxed{4.8\,in}$

6-6
p.298

$$\underset{\text{10cm = 5 m}}{\overline{\text{Scale}}}$$

12.) $\dfrac{10 \text{ cm}}{5 \text{ m}} = \dfrac{10 \text{ cm}}{500 \text{ cm}}$

$5 \text{ m} = \underline{500} \text{ cm}$

$\dfrac{100 \text{ cm}}{1 \text{ m}} \quad \dfrac{1 \text{ m}}{100 \text{ cm}}$

<u>Scale Factor</u>
must have the same
units

$SF = \dfrac{1}{50}$ Reduction

14.) $\dfrac{5 \, ft}{15 \, yd.} - \dfrac{5 \, ft.}{45 \, ft.} = \dfrac{1}{9}$ SF: $\dfrac{1}{9}$ Reduction

$15 \, yd = \underline{\quad} \, ft.$

$\dfrac{3 \, ft}{1 \, yd} \quad \dfrac{1 \, yd}{3 \, ft.}$

16.) $\dfrac{8\ in}{200\ mi.} = \dfrac{8\ in}{12,672,000\ in.} = \boxed{\dfrac{1}{1,584,000}}$ SF Reduction

$\boxed{\dfrac{5280\ ft}{1\ mile}}$ $\dfrac{1\ mi.}{5280\ ft}$ $\boxed{\dfrac{12\ in}{1\ ft}}$ $\dfrac{1\ ft}{12\ in.}$

$\dfrac{200\ mi.}{1} \times \dfrac{5280\ ft}{1\ mi.} \times \dfrac{12\ in}{1\ ft.} = 12,672,000\ in$

P. 821 6-6 #1-6 (all)
P. 822 6-7 #1-4 (all)