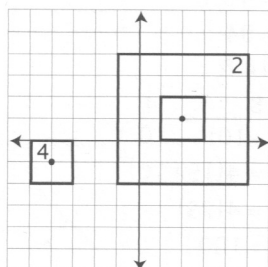


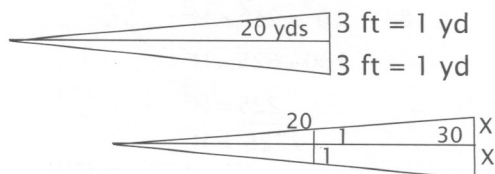
17. $\overline{BS} \cong \overline{RH}$: definition of a rhombus
18. $\overline{BR} \cong \overline{HS}$: definition of a rhombus
19. $\overline{BH} \cong \overline{BH}$: reflexive property
20. $\triangle HSB \cong \triangle BRH$: SSS

Systematic Review 28E

1-4.



5.



$$6. \quad \frac{X}{1} = \frac{50}{20}$$

$$20X = 50$$

$$X = \frac{50}{20} = 2\frac{1}{2} \text{ or } 2.5 \text{ yd}$$

(or 7.5 ft)

$$7. \quad 50^2 + 2.5^2 = H^2$$

$$2,500 + 6.25 = H^2$$

$$2,506.25 = H^2$$

$$H = \sqrt{2,506.25} \approx 50.06 \text{ yd (or 150.9 ft)}$$

$$8. \quad \text{Exterior angle} = 180^\circ - 108^\circ = 72^\circ$$

$$\frac{360^\circ}{72^\circ} = 5: \text{pentagon}$$

9. Area of one triangle:

$$A = \frac{1}{2}bh = \frac{1}{2}(11)(8) = 44 \text{ m}^2$$

Area of five triangles:

$$44 \text{ m}^2(5) = 220 \text{ m}^2$$

$$10. \quad P = 5(11 \text{ m}) = 55 \text{ m}$$

11. $\overline{KZ}$ bisects $\angle J K X$ and $\angle J Z X$
(Numbers 12-14 may be in any order.)

$$12. \quad \angle J K Z \cong \angle X K Z:$$

definition of bisector

$$13. \quad \angle J Z K \cong \angle X Z K:$$

definition of bisector

$$14. \quad \overline{KZ} \cong \overline{KZ}: \text{reflexive property}$$

$$15. \quad \triangle J Z K \cong \triangle X K Z: \text{ASA}$$

$$16. \quad P = 2(X+3) + 2(X+1)$$

$$2(X+3) + 2(X+1) = 36$$

$$2X+6+2X+2=36$$

$$4X+8=36$$

$$4X=28$$

$$X=7 \text{ ft}$$

$$17. \quad A = bh = (X+3)(X)$$

$$(X+3)(X) \Rightarrow (7+3)(7) = (10)(7) = 70 \text{ ft}^2$$

$$18. \quad P = 2(Y+4) + 2(Y-1)$$

$$2(Y+4) + 2(Y-1) = 98$$

$$2Y+8+2Y-2=98$$

$$4Y+6=98$$

$$4Y=92$$

$$Y=23 \text{ in}$$

$$19. \quad A = bh = (Y+4)(Y-1)$$

$$(Y+4)(Y-1) \Rightarrow$$

$$((23)+4)((23)-1) =$$

$$(27)(22) = 594 \text{ in}^2$$

$$20. \quad 5X^\circ + 4X^\circ = 90^\circ:$$

complementary angles

$$9X^\circ = 90^\circ$$

$$X = 10^\circ$$

Lesson Practice 29A

$$1. \quad \frac{5}{13}$$

$$2. \quad \frac{12}{13}$$

$$3. \quad \frac{5}{12}$$

$$4. \quad \frac{12}{13}$$

5. $\frac{5}{13}$
6. $\frac{12}{5}$
7. $\frac{7}{25}$
8. $\frac{24}{25}$
9. $\frac{7}{24}$
10. $\frac{24}{25}$
11. $\frac{7}{25}$
12. $\frac{24}{7}$
13. $\frac{6}{18} = \frac{1}{3}$
14. $\frac{17}{18}$
15. $\frac{6}{17}$
16. $\frac{17}{18}$
17. $\frac{6}{18} = \frac{1}{3}$
18. $\frac{17}{6}$
19. $\frac{8}{10} = \frac{4}{5}$
20. $\frac{6}{10} = \frac{3}{5}$
21. $\frac{8}{6} = \frac{4}{3}$
22. $\frac{6}{10} = \frac{3}{5}$
23. $\frac{8}{10} = \frac{4}{5}$
24. $\frac{6}{8} = \frac{3}{4}$

Lesson Practice 29B

1. $\frac{5}{5\sqrt{2}} = \frac{1}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$
2. $\frac{5}{5\sqrt{2}} = \frac{1}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

3. $\frac{5}{5} = 1$
4. $\frac{5}{5\sqrt{2}} = \frac{1}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$
5. $\frac{5}{5\sqrt{2}} = \frac{1}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$
6. $\frac{5}{5} = 1$
7. $\frac{13}{26} = \frac{1}{2}$
8. $\frac{13\sqrt{3}}{26} = \frac{\sqrt{3}}{2}$
9. $\frac{13}{13\sqrt{3}} = \frac{1}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{\sqrt{3}}{3}$
10. $\frac{13\sqrt{3}}{26} = \frac{\sqrt{3}}{2}$
11. $\frac{13}{26} = \frac{1}{2}$
12. $\frac{13\sqrt{3}}{13} = \frac{\sqrt{3}}{1} = \sqrt{3}$
13. $\frac{7}{\sqrt{130}} \times \frac{\sqrt{130}}{\sqrt{130}} = \frac{7\sqrt{130}}{130}$
14. $\frac{9}{\sqrt{130}} \times \frac{\sqrt{130}}{\sqrt{130}} = \frac{9\sqrt{130}}{130}$
15. $\frac{7}{9}$
16. $\frac{9}{\sqrt{130}} \times \frac{\sqrt{130}}{\sqrt{130}} = \frac{9\sqrt{130}}{130}$
17. $\frac{7}{\sqrt{130}} \times \frac{\sqrt{130}}{\sqrt{130}} = \frac{7\sqrt{130}}{130}$
18. $\frac{9}{7}$
19. $\frac{\sqrt{203}}{18}$
20. $\frac{11}{18}$
21. $\frac{\sqrt{203}}{11}$
22. $\frac{11}{18}$
23. $\frac{\sqrt{203}}{18}$
24. $\frac{11}{\sqrt{203}} \times \frac{\sqrt{203}}{\sqrt{203}} = \frac{11\sqrt{203}}{203}$

Systematic Review 29C

1. $\frac{30}{50} = \frac{3}{5}$

2. $\frac{40}{50} = \frac{4}{5}$

3. $\frac{30}{40} = \frac{3}{4}$

4. $\frac{40}{50} = \frac{4}{5}$

5. $\frac{30}{50} = \frac{3}{5}$

6. $\frac{40}{30} = \frac{4}{3}$

7. $\frac{A}{C}$

8. $\frac{B}{C}$

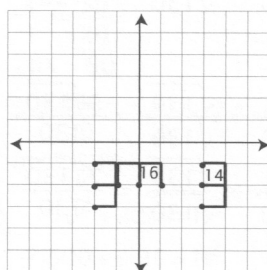
9. $\frac{A}{B}$

10. $\frac{B}{C}$

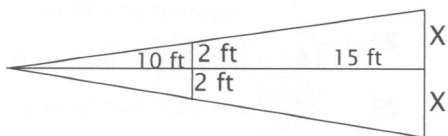
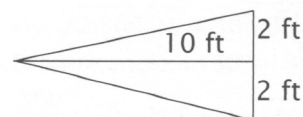
11. $\frac{A}{C}$

12. $\frac{B}{A}$

13-16.



17.



18. $\frac{X}{25} = \frac{2}{10}$
 $10X = 50$
 $X = 5$ ft

19. $\frac{X}{100} = \frac{2}{10}$

$10X = 200$

$X = 20$ ft

20. $\frac{X}{4} = \frac{2}{10}$

$10X = 8$

$X = \frac{8}{10} = \frac{4}{5}$ ft

Systematic Review 29D

1. $\frac{3.5}{12.5} \times \frac{10}{10} = \frac{35}{125} = \frac{7}{25}$

2. $\frac{12}{12.5} \times \frac{10}{10} = \frac{120}{125} = \frac{24}{25}$

3. $\frac{3.5}{12} = \frac{10}{10} = \frac{35}{120} = \frac{7}{24}$

4. $\frac{12}{12.5} \times \frac{10}{10} = \frac{120}{125} = \frac{24}{25}$

5. $\frac{3.5}{12.5} \times \frac{10}{10} = \frac{35}{125} = \frac{7}{25}$

6. $\frac{12}{3.5} \times \frac{10}{10} = \frac{120}{35} = \frac{24}{7}$

7. $\frac{4}{9}$

8. $\frac{8.5}{9} \times \frac{10}{10} = \frac{85}{90} = \frac{17}{18}$

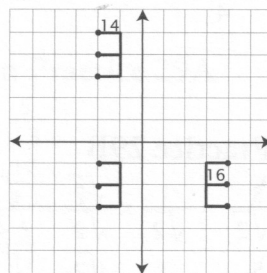
9. $\frac{4}{8.5} \times \frac{10}{10} = \frac{40}{85} = \frac{8}{17}$

10. $\frac{8.5}{9} \times \frac{10}{10} = \frac{85}{90} = \frac{17}{18}$

11. $\frac{4}{9}$

12. $\frac{8.5}{4} \times \frac{10}{10} = \frac{85}{40} = \frac{17}{8}$

13-16.


 17. Q is the midpoint of $\overline{UT}$: given

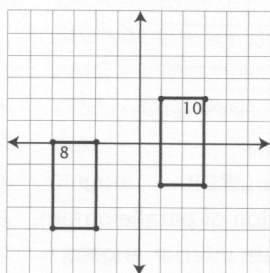
 18. $UQ \cong TQ$: definition of midpoint

19. $\angle UQS \cong \angle TQP$: vertical angles
 20. $\triangle QSU \cong \triangle QPT$: AAS

Systematic Review 29E

1. $\frac{8}{12.8} \times \frac{10}{10} = \frac{80}{128} = \frac{5}{8}$
2. $\frac{10}{12.8} \times \frac{10}{10} = \frac{100}{128} = \frac{25}{32}$
3. $\frac{8}{10} = \frac{4}{5}$
4. $\frac{10}{12.8} \times \frac{10}{10} = \frac{100}{128} = \frac{25}{32}$
5. $\frac{8}{12.8} \times \frac{10}{10} = \frac{80}{128} = \frac{5}{8}$
6. $\frac{10}{8} = \frac{5}{4}$

7-10.



10. Appears the same as the original, because the figure is symmetrical around the X axis.
11. equiangular triangle, equilateral
12. long leg $\div \sqrt{3} = \frac{5\sqrt{6}}{\sqrt{3}} = \frac{5\sqrt{2}}{1} = 5\sqrt{2}$
13. short leg $\times 2 = (5\sqrt{2})(2) = 10\sqrt{2}$
14. diameter
15. $40^\circ + 85^\circ = 125^\circ$
16. $180^\circ - 125^\circ = 55^\circ$
17. 180°
18. $180^\circ - 72^\circ = 108^\circ$
(supplementary angles)

19. $2B + 3B = 180^\circ$
(supplementary angles)
 $5B = 180^\circ$
 $B = 36^\circ$
 $3B = X$ (alternate interior angles)
 $X = 3(36^\circ) = 108^\circ$
 $108^\circ = X$
20. $6B + 14B = 180^\circ$
(supplementary angles)
 $20B = 180^\circ$
 $B = 9^\circ$
 $6B = X$ (alternate exterior angles)
 $X = 6(9^\circ) = 54^\circ$

Lesson Practice 30A

1. $\frac{6}{10} = \frac{3}{5}$
2. $\frac{8}{10} = \frac{4}{5}$
3. $\frac{6}{8} = \frac{3}{4}$
4. $\frac{5}{3}$
5. $\frac{5}{4}$
6. $\frac{4}{3}$
7. $\frac{24}{26} = \frac{12}{13}$
8. $\frac{10}{26} = \frac{5}{13}$
9. $\frac{24}{10} = \frac{12}{5}$
10. $\frac{13}{12}$
11. $\frac{13}{5}$
12. $\frac{5}{12}$
13. $\frac{4}{8.5} \times \frac{10}{10} = \frac{40}{85} = \frac{8}{17}$
14. $\frac{7.5}{8.5} \times \frac{10}{10} = \frac{75}{85} = \frac{15}{17}$
15. $\frac{4}{7.5} \times \frac{10}{10} = \frac{40}{75} = \frac{8}{15}$