

BLM Answers

BLM 1.GR.1: Get Ready

Fraction and Number Sense

1. a) $\frac{1}{3}, \frac{2}{5}, \frac{7}{10}, \frac{3}{4}$ b) $\frac{1}{2}, \frac{3}{5}, \frac{5}{8}, \frac{5}{6}$
c) $\frac{5}{4}, \frac{4}{3}, \frac{3}{2}, 2$ d) $\frac{7}{8}, \frac{10}{11}, 1, \frac{11}{10}$
e) $\frac{4}{7}, \frac{2}{3}, 1, 1\frac{1}{4}$ f) $\frac{49}{100}, \frac{1}{2}, \frac{5}{9}, \frac{8}{13}$
2. a) $\frac{13}{10}$ b) $\frac{3}{4}$ c) 3
d) $\frac{3}{4}$ e) $\frac{5}{24}$ f) 8

Ratio and Proportion

3. a) 8:1 b) 9:1 c) 1:3
d) 6:5 e) 1:4:6 f) 2:10:9
4. a) 48 b) 9 c) 5
d) 3 e) 5 f) 15
5. a) $m = 50$ b) $x = 12$
c) $a = 1$ d) $g = 20$
e) $v = 32$ f) $x = 33$

Angle Problems

6. a) $x = z = 55^\circ, y = 125^\circ$ b) $a = 70^\circ, b = c = 110^\circ$
c) $x = z = 45^\circ, y = 135^\circ$ d) $a = c = 55^\circ, b = 125^\circ$
e) $\angle x = 100^\circ$ f) $\angle y = 60^\circ$
g) $\angle a = 60^\circ$

BLM 1.1.1: Imperial Measure

1. a) 5.69 inches b) 5.08 inches
2. a) 1.25 b) 5 c) 36
3. a) 25 b) 240 c) 100
4. a) 512 b) 2048 c) 480
5. a) 480 b) 1056 c) 384 d) 1296
6. a) 7 b) 12 c) 15 d) 22
7. a) sq feet, sq inches, sq inches
b) ounces, pounds, pounds
c) fluid ounces, pints, gallons
8. 2.5
9. a) 180 ft
b) 60 yards
10. a) 360 square ft
b) 40 square yards
c) \$10

BLM 1.2.1: Conversions Between Metric and Imperial Systems

1. a) 4 b) 19 c) 17
d) 74 e) 3 f) 230

2. a) 32 b) 9 c) 11
d) 30 e) 87 f) 43
3. 10
4. 146 cm
5. 640
6. a) 32°C
b) 22°C
7. \$1.60
8. Kane Street at \$25 for 10 gallons of gas.
9. The Sun Supermarket at \$3.25 for 2 pounds of strawberries.

BLM 1.3.1: Similar Triangles

1. a) $\angle M = \angle P, \angle N = \angle Q, \angle O = \angle R$
b) $MN/PQ, MO/PR, NO/QR$
c) $\frac{MN}{PQ} = \frac{MO}{PR} = \frac{NO}{QR}$
2. a) $\angle A = \angle D, \angle B = \angle F, \angle C = \angle E$
b) $AB/DF, AC/DE, BC/EF$
c) $\frac{AB}{DF} = \frac{AC}{DE} = \frac{BC}{EF}$
3. a) *Graphs vary. Please make sure that the side lengths of the similar triangle maintain the ratios for the side lengths $AB = 5, BC = 4, AC = 3$*
b) *Graphs vary. Please make sure that the side lengths of the similar triangle maintain the ratios for the side lengths $DE = 3, EF = 3, DF = 6$*
c) *Graphs vary. Please make sure that the side lengths of the similar triangle maintain the ratios for the side lengths $GH = 4, HI = 2, GI = 1$*
4. $GI = 5, LK = 14, \angle H = 42^\circ, \angle G = \angle J = 52^\circ, \angle L = 86^\circ$
5. $AB = 3, CD = 6.32$
6. 1.6
7. 12.8

BLM 1.4.1: Solve Problems Using Similar Triangles

1. 1 m
2. 2 m
3. 16 cm
4. 40 cm
5. ramp 1 is 1.25 m, ramp 2 is 1 m
6. 30 ft
7. second candle is 12 cm tall, third candle is 16 cm tall

BLM Answers

BLM 1.CR.1: Chapter 1 Review

1. a) 19 b) 11.25 c) 1920 d) 200
2. a) 60 ft; 20 yd b) \$50
3. a) 54 ft^2 b) 6 yd^2 c) \$9.90
4. Estimate each measure for the indicated units.
a) 7 b) 72 c) 13
d) 48 e) 9
5. \$5 per gallon
6. a) 8 b) 13.5°
7. $NP = 6.3 \text{ cm}$, $\angle M = 50^\circ$, $\angle N = 82^\circ$,
 $TV = 24.3 \text{ cm}$, $\angle T = 50^\circ$, $\angle V = 48^\circ$
8. $DE = 8$
9. 2.67 m

BLM 1.PT.1: Practice Test

Multiple Choice

1. C
2. D
3. B
4. C
5. D
6. D
7. A
8. D

Short Response

9. a) 200 b) 212 c) 8 d) 7257
10. 12°C
11. $AC = 12$

Extended Response

12. a) 36
b) 4
c) \$2
13. Than was charged \$3 per gallon. Lilly was charged \$2.70 per gallon. So, Lilly got the better deal.
14. 12.8 m

BLM 1.CT.1: Chapter Test

Multiple Choice

1. A
2. B
3. B
4. A
5. B
6. C
7. B
8. A

Short Response

9. The temperature in Hawaii is about 30°C , while the temperature in Peterborough is 26°C . So, Hawaii is about 4 degrees warmer.
10. a) 6 b) 95 c) 100 d) 9072
11. $MO = 24$

Extended Response

12. a) 108 square feet; 12 square yards
b) \$15
13. Herman's Grocery has the better deal, since it charges \$1.50 per lb, while Chi's Grocery charges about \$1.75 per lb.
14. 750 m