

This test covers material taught in Dimensions Math 3B.

1 Fill in the blanks.

(a) $9 \times \square = 54$

(b) $8 \times 8 = \square$

(c) $\square \div 9 = 7$

(d) $81 \div \square = 9$

2 Write $>$ or $<$ in each \bigcirc .

(a) $9 \times 6 \bigcirc 9 \times 7$

(b) $8 \times 7 \bigcirc 6 \times 8$

(c) $56 \div 8 \bigcirc 72 \div 9$

3 Multiply or divide.

(a) 96×6

(b) $602 \div 7$

(c) $64 \div 8$

(d) 563×9

- 4 Ms. Johnson rides her bike to and from work every day. She lives 7 miles from work and works 5 days a week. Her friend gave her a ride home from work on Wednesday. How many miles did Ms. Johnson bike this week?

- 5 Jack baked 6 batches of cookies. There were 22 cookies in each batch. He wants to put an equal number of cookies into 9 containers. How many cookies will be in each container? How many cookies will be left over?



- 6 Shade $\frac{5}{8}$ of the bar.



7 (a) $\frac{6}{8}$ and $\frac{\square}{8}$ make 1.

(b) $\frac{7}{9}$ is $\frac{\square}{9}$ more than $\frac{2}{9}$.

(c) $\frac{1}{5}$ is $\frac{\square}{5}$ less than $\frac{4}{5}$.

- 8 Write $>$ or $<$ in each \bigcirc .

(a) $\frac{3}{9} \bigcirc \frac{3}{5}$

(b) $\frac{5}{7} \bigcirc \frac{3}{7}$

(c) $\frac{8}{9} \bigcirc \frac{8}{15}$

(d) $\frac{11}{12} \bigcirc \frac{8}{12}$

- 9 Camila's birthday cake was cut into 12 equal pieces. Camila ate 3 pieces and her friends ate $\frac{7}{12}$ of the cake. What fraction of the cake is left?

- 10 Find the missing numerators or denominators.

(a) $\frac{2}{5} = \frac{\boxed{}}{15}$

(b) $\frac{3}{6} = \frac{9}{\boxed{}}$

(c) $\frac{1}{2} = \frac{\boxed{}}{10}$

(d) $\frac{2}{8} = \frac{\boxed{}}{16}$

11 What sign, $>$, $<$, or $=$, goes in each \bigcirc ?

(a) $\frac{1}{4} \bigcirc \frac{4}{3}$

(b) $\frac{2}{3} \bigcirc \frac{4}{6}$

(c) $\frac{4}{5} \bigcirc \frac{6}{7}$

(d) $\frac{4}{9} \bigcirc \frac{2}{8}$

12 Find the missing numerators or denominators.

(a) $\frac{3}{8} + \frac{\boxed{}}{8} = \frac{7}{8}$

(b) $\frac{\boxed{}}{5} + \frac{1}{5} = \frac{4}{5}$

(c) $\frac{8}{10} - \frac{\boxed{}}{10} = \frac{3}{10}$

(d) $\frac{\boxed{}}{6} - \frac{2}{6} = \frac{1}{6}$

13 Add or subtract.

Write your answer in simplest form.

(a) $\frac{1}{10} + \frac{5}{10}$

(b) $\frac{5}{9} + \frac{1}{9}$

(c) $\frac{4}{6} - \frac{2}{6}$

(d) $\frac{9}{10} - \frac{1}{10}$

14 Diego used $\frac{1}{4}$ cup of white sugar and $\frac{2}{4}$ cup of brown sugar to bake cookies.
How much sugar did he use altogether?



15 Fill in the blanks.

(a) $105 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

(b) $3 \text{ m } 55 \text{ cm} = \boxed{} \text{ cm}$

(c) $2,020 \text{ m} = \boxed{} \text{ km } \boxed{} \text{ m}$

(d) $3,008 \text{ m} = \boxed{} \text{ km } \boxed{} \text{ m}$

(e) $1 \text{ km } 55 \text{ m} = \boxed{} \text{ m}$

(f) $3 \text{ L } 22 \text{ mL} = \boxed{} \text{ mL}$

(g) $2,500 \text{ mL} = \boxed{} \text{ L } \boxed{} \text{ mL}$

(h) $5,520 \text{ g} = \boxed{} \text{ kg } \boxed{} \text{ g}$

(i) $1 \text{ kg } 480 \text{ g} = \boxed{} \text{ g}$

16 Subtract.

(a) $1 \text{ m} - 25 \text{ cm} = \boxed{} \text{ cm}$

(b) $3 \text{ km} - 2 \text{ km } 30 \text{ m} = \boxed{} \text{ m}$

(c) $9 \text{ km} - 4 \text{ km } 330 \text{ m} = \boxed{} \text{ km } \boxed{} \text{ m}$

(d) $8 \text{ m} - 2 \text{ m } 51 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

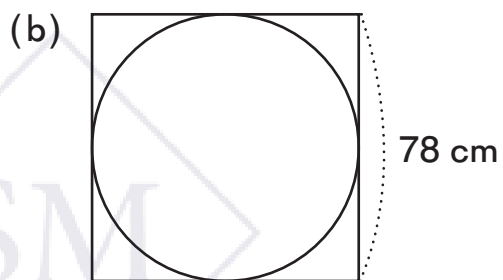
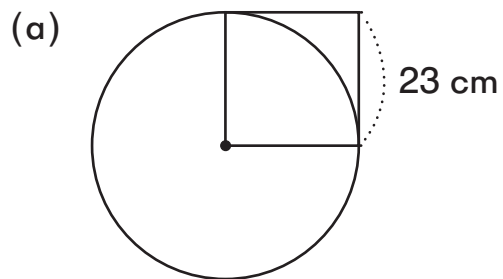
- 17** Wei walked 1 km 320 m to the library.
She then walked 590 m to the park.
How far did she walk altogether?

- 18** The weight of a bag of flour is 1 kg 500 g.
The weight of a bag of sugar is 1 kg 814 g.
What is the weight of the two bags altogether?

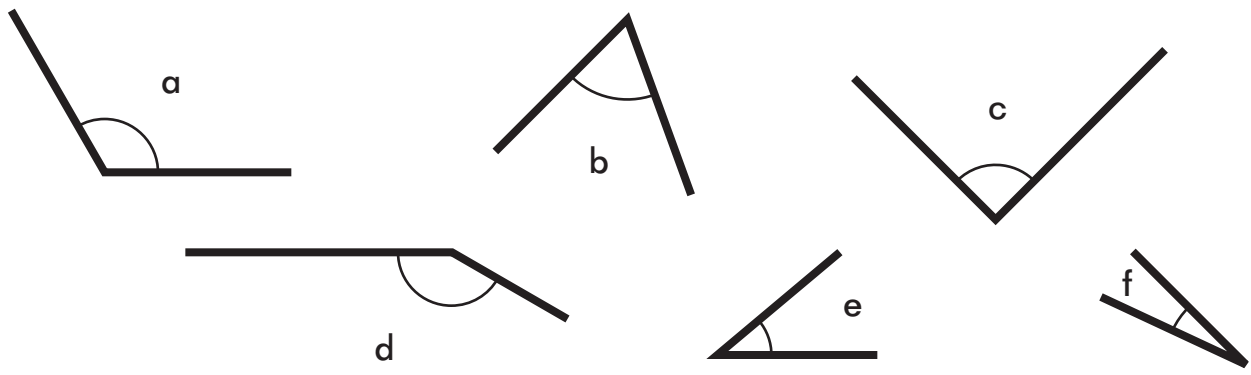


- 19 Jackie had 9 L 350 mL of paint.
She used 1 L 220 mL to paint her room and 2 L 450 mL to paint her kitchen.
How much paint does she have left?

- 20 How long is the radius and diameter of each circle?



21

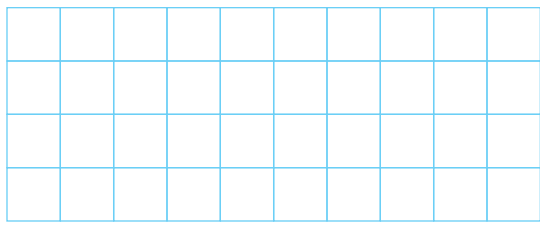
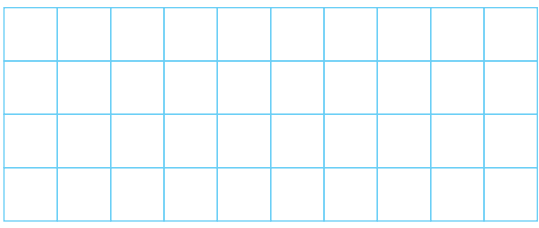


- (a) List the angles in order from smallest to largest.
- (b) Which angle is a right angle?
- (c) Which angles are larger than a right angle?
- (d) Which angles are smaller than a right angle?

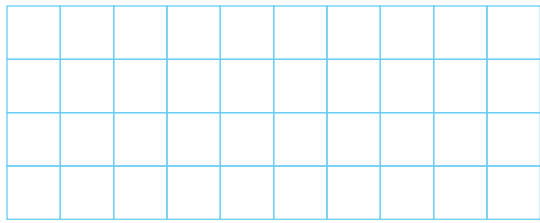
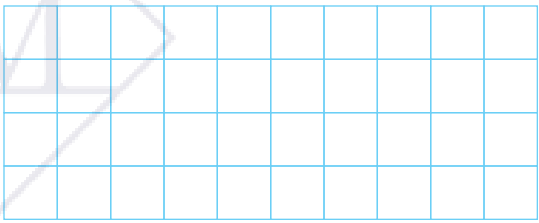
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Draw the following shapes:

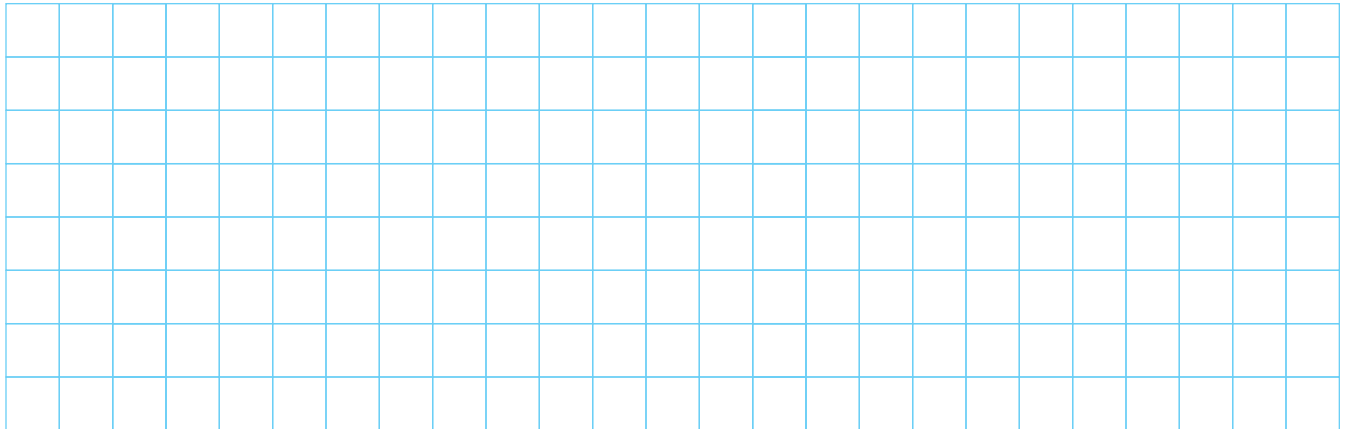
- (a) A triangle with two equal angles
- (b) A shape that is not a quadrilateral



- (c) A rhombus with no right angles
- (d) A quadrilateral with only one right angle.



- 23** Draw three different rectangles, each with an area of 18 square units.
Find the perimeter of each rectangle.

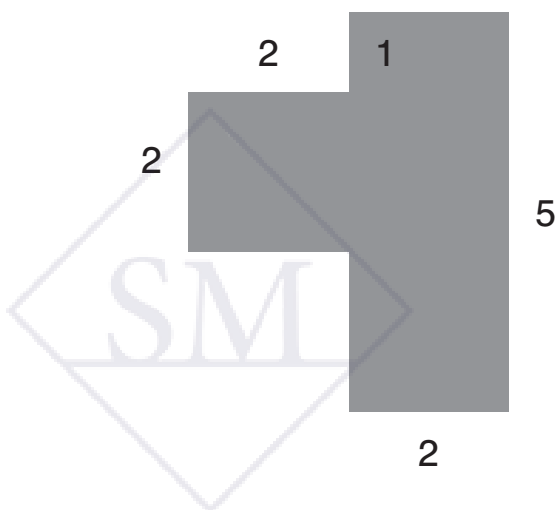


- 24** Find the area and perimeter of rectangles with the following dimensions.

(a) Length: 8 ft
Width: 12 ft

(b) Length: 52 cm
Width: 8 cm

- 25** Find the area of the shaded figure in square units.



26



- (a) Find the area and perimeter of the two rectangles.
- (b) Which rectangle has a greater area?
- (c) Which rectangle has a greater perimeter?

- 27 Alex wants to tile the floor of his bathroom. His bathroom is 8 ft long and 5 ft wide. The tiles cost \$9 per square foot. How much will it cost to tile his bathroom?



28 Fill in the blanks.

(a) $70 \text{ min} = \boxed{} \text{ h } \boxed{} \text{ min}$

(b) $1 \text{ h } 7 \text{ min} = \boxed{} \text{ min}$

(c) $280 \text{ s} = \boxed{} \text{ min } \boxed{} \text{ s}$

(d) $3 \text{ min } 22 \text{ s} = \boxed{} \text{ s}$

(e) $18 \text{ days} = \boxed{} \text{ weeks } \boxed{} \text{ days}$

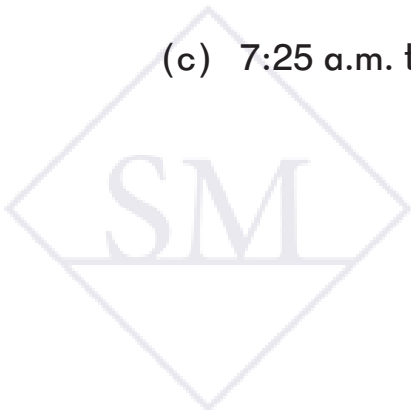
(f) $1 \text{ week } 4 \text{ days} = \boxed{} \text{ days}$

29 How much time passes from...

(a) 7:30 p.m. to 5:00 a.m.?

(b) 11:15 a.m. to 4:10 p.m.?

(c) 7:25 a.m. to 11:55 a.m.?



30 What time is it...

- (a) 50 minutes before 11:45 a.m.?
- (b) 1 hour and 52 minutes before 11:45 a.m.?
- (c) 50 minutes after 11:45 a.m.?
- (d) 1 hour and 52 minutes after 11:45 a.m.?

31 Dinner was ready at 6:15 p.m.
Andrei spent 1 hour and 20 minutes preparing the meal.
What time did he begin preparing the meal?



32 Fill in the blanks.

(a) $75¢ + 70¢ = \$$

(b) $\$24.65 + 95¢ = \$$

(c) $\$12.72 + \$14.86 = \$$

(d) $\$44.21 - \$32.80 = \$$

33 Mario had two twenty-dollar bills.

He purchased a tennis racket for \$24.78 and a can of tennis balls for \$9.95.

How much change did he receive?

34 Veronica earned \$68 dollars a week for 7 weeks.

She then spent \$37.88 on a pair of pants and \$21.90 on a hat.

How much money did she have left?



Answer Key

- 1** (a) 6 (b) 64
(c) 63 (d) 9

- 2** (a) < (b) >
(c) <

- 3** (a) 576 (b) 86
(c) 8 (d) 5,067

- 4** 63 miles

- 5** 14 cookies with 6 left over



- 7** (a) 2 (b) 5
(c) 3

- 8** (a) < (b) >
(c) > (d) >

- 9** $\frac{2}{12}$ or $\frac{1}{6}$

- 10** (a) 6 (b) 18
(c) 5 (d) 4

- 11** (a) < (b) =
(c) < (d) >

- 12** (a) 4 (b) 3
(c) 5 (d) 3

- 13** (a) $\frac{3}{5}$ (b) $\frac{2}{3}$
(c) $\frac{1}{3}$ (d) $\frac{4}{5}$

- 14** $\frac{3}{4}$ cup

- 15** (a) 1; 5 (b) 355
(c) 2; 20 (d) 3; 8
(e) 1,055 (f) 3,022
(g) 2; 500 (h) 5; 520
(i) 1,480

Answer Key

- 16** (a) 75 (b) 970
(c) 4; 670 (d) 5; 49

17 1 km 910 m

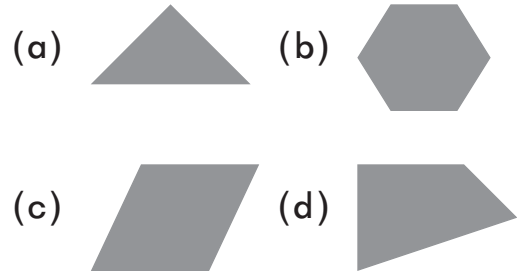
18 3 kg 314 g

19 5 L 680 mL

- 20** (a) Radius: 23 cm
Diameter: 46 cm
(b) Radius: 39 cm
Diameter: 78 cm

- 21** (a) f, e, b, c, a, d
(b) c
(c) a, d
(d) b, e, f

- 22** Answers will vary. Example answers provided.



Perimeter: 38 units

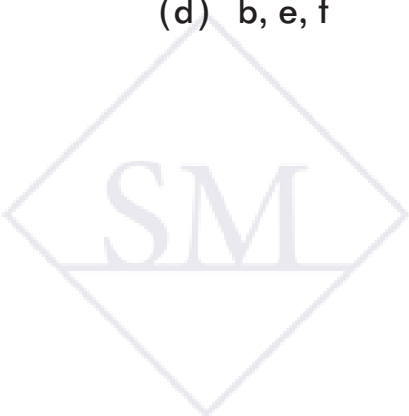


Perimeter: 22 units

Perimeter:
18 units

- 24** (a) Area: 96 ft²; Perimeter: 40 ft
(b) Area: 416 ft²; Perimeter: 120 ft

25 14 square units



Answer Key

- 26** (a) Rectangle A:
Area: 14 ft²; Perimeter: 18 ft
Rectangle B:
Area: 16 ft²; Perimeter: 16 ft
(b) Rectangle B has a greater area.
(c) Rectangle A has a greater perimeter.

27 \$360

- 28** (a) 1; 10 (b) 67
(c) 4; 40 (d) 202
(e) 2; 4 (f) 11

- 29** (a) 9 h 30 min
(b) 4 h 55 min
(c) 4 h 30 min

- 30** (a) 10:55 a.m.
(b) 9:53 a.m.
(c) 12:35 p.m.
(d) 1:37 p.m.

31 4:55 p.m.

- 32** (a) 1.45 (b) 25.60
(c) 27.58 (d) 11.41

33 \$5.27

34 \$416.22