Select the correct answer(s) from the given options:

1. Write the ratio as a rate.The ratio of miles to the numbers of hours is 300 to 6
   a) 50 miles/hour
   b) 300 miles/hour
   c) 60 miles/hour
   d) 25 miles/hour

2. Write the ratio as a rate. The ratio of feet to the number of seconds is 90 to 30
   a) 30 feet/second
   b) 3 feet/second
   c) 60 feet/second
   d) 15 feet/second

3. Write the ratio as a rate. The ratio of books to number of students is 72 to 12
   a) 5 books per student
   b) 8 books per student
   c) 6 books per student
   d) 4 books per student

4. Write the unit rate. 8 boxes can hold 72 books
   a) 7 books per box
   b) 8 books per box
   c) 9 books per box
   d) 6 books per box

5. Write the unit rate. 85 liters of water in 5 containers
   a) 16 liters per container
   b) 15 liters per container
   c) 17 liters per container
   d) 18 liters per container

6. Write the unit rate. 90 copies in 9 minutes
   a) 9 copies per minute
   b) 11 copies per minute
   c) 12 copies per minute
   d) 10 copies per minute

7. Write the unit rate. Typing 330 words in 3 minutes
   a) 33 words per minute
   b) 100 words per minute
   c) 110 words per minute
   d) 110 words per hour

8. Write the unit rate. 8 hours to cover 304 kilometers
   a) 32 kilometer per hour
   b) 38 kilometer per hour
   c) 34 kilometer per hour
   d) 36 kilometer per hour

9. Write the unit rate. 84 copies in 7 minutes
   a) 10 copies per minute
   b) 14 copies per minute
   c) 12 copies per minute
   d) 16 copies per minute

10. Write the unit rate. Earn $88 for 8 hours of work
   a) 10 dollars per hour of work
   b) 11 dollars per hour of work
   c) 12 dollars per hour of work
   d) 8 dollars per hour of work

11. Write the unit rate. 330 pencils in 22 boxes
   a) 25 pencils per box
   b) 16 pencils per box
   c) 14 pencils per box
   d) 15 pencils per box

12. Write the unit rate. 2400 meters in 20 second
   a) 12 meters/second
   b) 1200 meters/second
   c) 120 meters/second
   d) 140 meters/second

13. Write the unit rate. 25 boxes can hold 150 books
   a) 5 books per box
   b) 6 books per box
   c) 4 books per box
   d) 8 books per box

14. Write the unit rate. 225 students in 5 buses
   a) 42 students per bus
   b) 40 students per bus
   c) 46 students per bus
   d) 45 students per bus

15. Write the unit rate. 343 miles in 7 hours
   a) 49 miles/hour
   b) 58 miles/hour
   c) 59 miles/hour
   d) 48 miles/hour

Grade 6 Math : Divide Decimals by Decimals

Select the correct answer(s) from the given options:

Do NOT use a calculator.

1. Divide: 0.8 ÷ 0.4 =
   a) 2
   b) 2.2
   c) 0.2
   d) 0.02

2. Divide: 16.8 ÷ 3.2 =
   a) 52.5
   b) 5.25
   c) 5.52
   d) 5.2

3. Divide: 27.84 ÷ 7.5 =
   a) 37.12
   b) 371.2
   c) 3.812
   d) 3.712

4. Divide: 48.38 ÷ 8.2 =
   a) 5.9
   b) 5.8
   c) 59
   d) 5.7

5. Divide: 566.25 ÷ 45.3 =
   a) 16.5
   b) 1.25
   c) 15.2
   d) 12.5

6. Divide: 35.775 ÷ 7.5 =
   a) 40.7
   b) 4.07
   c) 47.7
   d) 4.77

7. Divide: 9 tenths ÷ 3 tenths =
   a) 0.3
   b) 30
   c) 3
   d) 0.03

8. Divide: 18 tenths ÷ 3 tenths =
   a) 60
   b) 0.6
   c) 6
   d) 0.06

9. Divide: 24 hundredths ÷ 6 hundredths =
   a) 0.4
   b) 0.04
   c) 40
   d) 4

Grade 6 Math : Writing Numerical Expressions

Select the correct answer(s) from the given options:

1. Choose an expression for :
4 times the sum of 34 and 8

a) 4 + (34 + 8) b) 4 × (34 + 8)

c) (4 × 34) + 8 d) 34 + (4 × 8)

2. Choose an expression for :
5 times the difference between 54 and 49

a) (5 × 54) – 49 b) 5 + (54 – 49)

c) 5 × (54 – 49) d) 54 - (5 × 49)

3. Choose an expression for :
3 times the sum of 23 and 7

a) 3 + (23 + 7) b) (3 × 23) + 7

c) 3 × (23 + 7)

4. Choose an expression for :
8 times the difference between 43 and 38

a) 8 × (43 + 38) b) 8 × (43 – 38)

c) 8 ÷ (43 – 38)

5. Choose an expression for :
The sum of 9 and 5, doubled

a) (9 + 5) + 2 b) (9 + 5 x 2)

c) 9 + 5 x 2 d) (9 + 5) x 2

6. Choose an expression for :
4 times the difference between 26.8 and 23.7

a) 4 + (26.8 – 23.7) b) (4 × 26.8) – 23.7

c) 4 × 26.8 – 23.7 d) 4 × (26.8 – 23.7)

7. Choose an expression for :
Three less than the product of 5 and 6

a) (5 × 6) – 3 b) 3 – (5 × 6)

c) 5 × (6 – 3)

8. Choose an expression for :
Six more than the product of 3 and 8

a) (3 + 8) × 6 b) (3 × 8) + 6

c) 3 × (8 + 6)

9. Choose an expression for :
Triple the sum of 24 and 16

a) 24 + (16 + 3) b) (24 + 16) x 3

c) 24 + (16 x 3) d) (24 × 16) + 3

10. Choose an expression for :
Four less than the product of 14 and 5

a) (14 × 5) – 4 b) (14 + 5) – 4

c) 14 × (5 – 4) d) (14 × 5) + 4

11. Choose an expression for :
The product of 6 and 8, divided by 4

a) 6 × (8 ÷ 4) b) (6 × 8) ÷ 4

c) 6 ÷ 4 × 8

12. Choose an expression for :
The sum of 4 nines and 3 nines

a) 4 + (3 × 9) b) 4 × 9 + 3

c) (4 × 9) + (3 × 9)

13. Choose an expression for :
The sum of 7 twenties and 4 twenties

a) (7 + 20) × (4 + 20) b) 7 + (4 × 20)

c) (7 × 20) + (4 × 20) d) 7 × 20 + 4

14. Choose an expression for :
The sum of 22 fives and 16 fives

a) (22 × 5) + (16 × 5) b) (22 × 5) × (16 × 5)

c) 22 + 16 × 5 d) (22 + 5) × (16 + 5)

15. Choose an expression for :
The difference between 7 forty-six and 4 forty-six

a) (7 × 46) + (4 × 46) b) (7 × 46) – (4 × 46)

c) 7 – (4 × 46)

16. Choose an expression for :
Half of the difference between 26 and 18

a) 26 ÷ 2 – 18 b) (26 – 18) ÷ 2

c) 26 – (18 ÷ 2)

17. Choose an expression for :
The difference between 4 sixteens and 2 fourteens

a) (4 + 2) + (16 – 14) b) (4 + 16) – (2 + 14)

c) (4 + 16) + (2 + 14) d) (4 × 16) – (2 × 14)

18. Choose an expression for :
The sum of 5 fifteens and 3 fifteens

a) (5 + 15) + (3 + 15) b) 5 × (3 × 15)

c) (5 × 15) + (3 × 15) d) (5 × 15) + (3 + 15)

19. Choose an expression for :
Half of the sum of 32 and 8

a) 32 ÷ 2+ 8 b) 32 + (8 ÷ 2)

c) (32 + 8) ÷ 2

20. Choose an expression for :
20 times the sum of 4 and 2

a) (20 × 4) + 2 b) 20 × (4 + 2)

c) 20 × 4 + 2

Select the correct answer(s) from the given options:

1. Multiply: 2.4 × 4 =
   a) 96
   b) 9.6
   c) 960
   d) 0.96
2. Multiply: 4.6 × 9 =
   a) 4.14
   b) 414
   c) 41.4
   d) 0. 414
3. Multiply: 9.3 × 14 =
   a) 103.25
   b) 103.22
   c) 10.32
   d) 103.2
4. Multiply: 3.82 × 12 =
   a) 45.48
   b) 4.584
   c) 45.84
   d) 458.4
5. Multiply: 23.63 × 16 =
   a) 378.08
   b) 378.80
   c) 37.08
   d) 38.08
6. Multiply: 7.47 × 24 =
   a) 177.28
   b) 279.28
   c) 179.28
   d) 179.82
7. Multiply : 6 × 8 ones =
   a) 48 tenths
   b) 48 tens
   c) 48 ones
   d) 48 hundreds
8. Multiply : 3 × 7 ones =
   a) 21 hundredths
   b) 21 tenths
   c) 21 tens
   d) 21 ones
9. Multiply : 5 × 7 tenths =
   a) 35 tenths
   b) 35 ones
   c) 35 hundreds
   d) 35 hundredths

10. Multiply : 0.8 × 1.2 =
    a) 9.6
    b) 0.96
    c) 0.096
    d) 0.906

11. Multiply : 1.4 × 3.6 =
    a) 50.4
    b) 5.04
    c) 5.004
    d) 5.4

12. Multiply : 4.928 × 1.5 =
    a) 73.92
    b) 7.492
    c) 7.392
    d) 7.39
13. Multiply : 27.52 × 23.9 =
    a) 657.728
    b) 657.028
    c) 657.708
    d) 557.728
14. Fill in the blank.
    3 tenths × 6 tenths = _____ tenths
    a) 180
    b) 18

Select the correct answer(s) from the given options:

1. There are 40 colored pens in a pen holder. 11 pens are red, 15 pens are black, and the remaining pens are blue. Ratio of red pens to black pens is

a) 11:14 b) 11:15

c) 15:11 d) 14:15

2. There are 40 colored pens in a pen holder. 11 pens are red, 15 pens are black, and the remaining pens are blue. What is the ratio of red pens to blue pens?

a) 15:11 b) 11:15

c) 11:14 d) 14:15

3. There are 40 colored pens in a pen holder. 11 pens are red, 15 pens are black, and the remaining pens are blue. What is the ratio of black pens to red pens?

a) 11:14 b) 11:15

c) 15:11 d) 14:15

4. There are 40 colored pens in a pen holder. 11 pens are red, 15 pens are black, and the remaining pens are blue. Ratio of blue pens to red pens is

a) 15:11 b) 14:15

c) 11:14 d) 14:11

5. John has 61 colored marbles. There are 21 blue marbles, 15 black marbles, 17 brown marbles, and the remaining are red marbles. Ratio of red marbles to black marbles is

a) 8:17 b) 9:15

c) 15:11 d) 8:15

6. John has 61 colored marbles. There are 21 blue marbles, 15 black marbles, 17 brown marbles, and the remaining are red marbles. What is the ratio of black marbles to brown marbles?

a) 17:15 b) 8:15

c) 15:17 d) 8:15

7. John has 61 colored marbles. There are 21 blue marbles, 15 black marbles, 17 brown marbles, and the remaining are red marbles. Write the ratio of blue marbles to black marbles.

a) 7:5 b) 5:7

c) 7:15 d) 15:7

8. John has 61 colored marbles. There are 21 blue marbles, 15 black marbles, 17 brown marbles, and the remaining are red marbles. What is the ratio of black marbles to red marbles?

a) 15:17 b) 15:8

c) 17:15 d) 8:15

9. John has 61 colored marbles. There are 21 blue marbles, 15 black marbles, 17 brown marbles, and the remaining are red marbles. Ratio of brown marbles to red marbles is

a) 8:15 b) 17:8

c) 8:17 d) 15:17

10. John has 61 colored marbles. There are 21 blue marbles, 15 black marbles, 17 brown marbles, and the remaining are red marbles. Ratio of black marbles to blue marbles is

a) 7:5 b) 5:7

c) 7:15 d) 5:17

11. John has 61 colored marbles. There are 21 blue marbles, 15 black marbles, 17 brown marbles, and the remaining are red marbles. What is the ratio of brown marbles to blue marbles?

a) 8:21 b) 17:21

c) 21:15 d) 21:17

Greatest Common Factor

Select the correct answer(s) from the given options:

1. What is the greatest common factor of 2 and 8?

a) 2 b) 4
c) 8 d) 16

2. What is the greatest common factor of 16 and 20?

a) 8 b) 4
c) 2 d) 5

3. What is the greatest common factor of 24 and 27?

a) 8 b) 4
c) 3 d) 6

4. What is the greatest common factor of 18 and 24?

a) 3 b) 6
c) 8 d) 4

5. What is the greatest common factor of 14 and 63?

a) 2 b) 7
c) 1 d) 9

6. What is the greatest common factor of 40 and 72?

a) 8 b) 2
c) 6 d) 4

7. What is the greatest common factor of 48 and 84?

a) 8 b) 12
c) 6 d) 10

8. What is the greatest common factor of 45 and 75?

a) 5 b) 10
c) 25 d) 15

Least Common Multiple

Select the correct answer(s) from the given options:

9. What is the least common multiple of 8 and 6?

a) 6 b) 24
c) 12 d) 8

10. What is the least common multiple of 4 and 8?

a) 4 b) 8
c) 6 d) 2

11. What is the least common multiple of 4 and 10?

a) 12 b) 20
c) 10 d) 8

12. What is the least common multiple of 2 and 10?

a) 5 b) 20
c) 2 d) 10

13. What is the least common multiple of 3 and 11?

a) 3 b) 1
c) 11 d) 33

14. What is the least common multiple of 3 and 12?

a) 6 b) 3
c) 4 d) 12

15. What is the least common multiple of 8 and 5?

a) 13 b) 40
c) 8 d) 5

16. What is the least common multiple of 5 and 7?

a) 1 b) 35
c) 12

Opposite Value

Select the correct answer(s) from the given options:

1. What is the opposite of 4?
   a) -4
   b) 4
2. What is the opposite of 9?
   a) 9
   b) -9
3. What is the opposite of -10?
   a) 10
   b) -10
4. What is the opposite of -3?
   a) -3
   b) 3
5. What is the opposite of 2?
   a) -2
   b) 2
6. What is the opposite of the opposite of 6?
   a) -6
   b) 6
7. What is the opposite of the opposite of -2?
   a) 2
   b) -2

Absolute Value

Select the correct answer(s) from the given options:

8. What is the absolute value of -7?
   a) 7
   b) -7
9. What is the absolute value of 6?
   a) -6
   b) 6
10. What is the absolute value of -9?
    a) 9
    b) -9
11. What is the absolute value of -15?
    a) -15
    b) 15
12. What is the absolute value of 35?
    a) 35
    b) -35

Select the correct answer(s) from the given options:

1. Add:
958.124 + 125.068 =
a) 1083.192 b) 1803.192
c) 1183.192 d) 1083.20

2. Add:
35.658 + 48.364 =
a) 84.022 b) 84.220
c) 84.202

3. Add:
28.076 + 67.315 =
a) 95.491 b) 95.391

4. Add:
84.207 + 28.963 =
a) 113.17 b) 114.17
c) 123.47

5. Add:
5 tenths + 3 tenths =
a) 8 tenths b) 80 tenths
c) 8 hundredths

6. Add:
4 tenths + 2 tenths =
a) 6 b) 0.06
c) 0.6 d) 60

7. Add:
3 hundredths + 6 hundredths =
a) 9 b) 90
c) 0.9 d) 0.09

8. Add:
17 hundredths + 7 hundredths =
a) 24 hundredths b) 24 tenths

9. Add:
25 hundredths + 8 hundredths =
a) 33 b) 0.33
c) 3.3 d) 0.033

10. Subtract:
46.89 – 15.63 =
a) 31.36 b) 31.38
c) 31.26 d) 30.26

11. Subtract:
946.123 – 453.123 =
a) 483 b) 593
c) 493 d) 495

12. Subtract:
645.375 – 345.921 =
a) 299.454 b) 298.454
c) 299.654 d) 288.454

13. Subtract:
970.123 – 670.102 =
a) 300.21 b) 300.021
c) 300.02 d) 300.011

14. Subtract:
42.023 – 12.332 =
a) 29.591 b) 28.691
c) 29.681 d) 29.691

15. Subtract:
9 tenths – 5 tenths =
a) 40 b) 4
c) 0.4 d) 0.04

16. Subtract and write the difference in standard form.
38 thousandths – 14 thousandths = _____ thousandths
a) 14 b) 24
c) 34 d) 44

17. Subtract and write the difference in standard form.
43 thousandths – 17 thousandths =
a) 2.6 b) 0.26
c) 0.026 d) 0.002

Select the correct answer(s) from the given options:

1. Evaluate : 24 ÷ (12 – 8)
a) 10 b) 6
c) 4 d) 3

2. (6 + 5) × 4
a) 44 b) 26
c) 29 d) 40

3. Evaluate : (56 – 35) ÷ 3
a) 8 b) 7
c) 9 d) 6

4. (40 × 5) ÷ 4
a) 50 b) 52
c) 45 d) 40

5. (38 ÷ 2) × 4
a) 76 b) 72
c) 74 d) 70

6. (56 – 44) × 5
a) 60 b) 64
c) 62 d) 66

7. (11 x 8) – 9
a) 79 b) 78
c) 80 d) 77

8. 24 – (3 × 2)
a) 18 b) 16
c) 19 d) 14

9. (84 ÷ 14) x 9 ÷ 18
a) 3 b) 30
c) 4 d) 35

10. [(50 x 2) – 10] ÷ 5
a) 90 b) 98
c) 18 d) 19

11. (57 – 25) ÷ 2 + 16 x 2
a) 64 b) 48
c) 32 d) 44

12. 6 × [(34 – 26) + 3]
a) 60 b) 48
c) 66 d) 40

13. 36 x 3 + (56 ÷ 7) – 65
a) 51 b) 43
c) 100 d) 55

14. 9 x (8 – 6) ÷ 2
a) 9 b) 18
c) 36 d) 24

15. 26 x 3 + [(56 ÷ 7) – 5]
a) 78 b) 81
c) 86 d) 73

16. (42 + 7) - (4 + 5) x 4
a) 40 b) 13
c) 36 d) 16

17. 14 + 7) + (66 ÷ 6)] ÷ 4
a) 24 b) 16
c) 32 d) 8

1. A water tank that is rectangular in shape is 15 feet long, 10 feet wide, and 6 feet deep. What is the volume of the water tank?

1. a) 900 cubic feet
2. b) 600 cubic feet
3. c) 300 cubic feet
4. d) 90 cubic feet

2. The volume of the box is 216 cubic inches. Find the length of each side of the box.

1. a) 4 inches
2. b) 8 inches
3. c) 6 inches
4. d) 3 inches

3. What is the volume of the truck bed which is 10 feet long, 4 feet wide, and has a height of 3 feet?

1. a) 40 cubic feet
2. b) 12 cubic feet
3. c) 30 cubic feet
4. d) 120 cubic feet

4. John has a fish tank at home. The tank is rectangular in shape and has dimensions of 8 feet x 6 feet x 4 feet. What is the volume of the tank?

1. a) 92 cubic feet
2. b) 192 cubic feet
3. c) 24 cubic feet
4. d) 48 cubic feet

5. How much water is needed to fill a water tank that is 15 feet long, 8 feet wide, and 4 feet deep.

1. a) 60 cubic feet
2. b) 32 cubic feet
3. c) 480 cubic feet
4. d) 120 cubic feet

6. Kelly bought a new rectangular cage for her pet. What is the volume of the cage if it is 4 feet long, 3 feet wide, and 2 feet high?

1. a) 20 cubic feet
2. b) 24 cubic feet
3. c) 18 cubic feet
4. d) 32 cubic feet

7. A juice box measures 6 cms by 4 cms by 10 cms. What is the volume of the juice box?

1. a) 240 cubic centimeters
2. b) 40 cubic centimeters
3. c) 60 cubic centimeters
4. d) 24 cubic centimeters

8. What is the volume of the rectangular shaped box which measures 8 feet long, 4 feet wide, and 5 feet deep?

1. a) 40 cubic feet
2. b) 120 cubic feet
3. c) 160 cubic feet
4. d) 32 cubic feet

9. Find the volume of a prism that is 5 m long, 40 cm wide, and 2500 mm high.

1. a) 50 cubic meters
2. b) 200 cubic meters
3. c) 500 cubic meters
4. d) 5 cubic meters

10. What is the volume of the rectangular shaped box which measures 12 m long, 6 m wide, and 4 m deep?

1. a) 144 cubic meters
2. b) 72 cubic meters
3. c) 24 cubic meters
4. d) 288 cubic meters