



Whole Numbers and Operations

- 1 Add these numbers
- $$\begin{array}{r} 145 \\ +967 \\ \hline \end{array}$$

A	B	C
1,102	0	741
D	E	F
2,965	2,224	1,112

- 2 Add these numbers

$$350 + 174$$

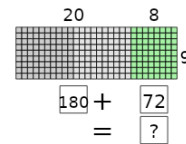
A	B	C
424	1,048	175
D	E	F
524	1,397	699

- 3 Select the equation that is the same as the given multiplication equation using the commutative property

$$2 \times 6 \times 4$$

A	B
5×17	2×24
C	D
19×4	2×10
E	F
9×4	16×7

- 4 Use the area model to find the product of 28 and 9



A	B	C
247	249	252
D	E	F
248	255	256

- 5 Multiply these numbers

$$4 \times 1$$

A	B	C
3	5	7
D	E	F
9	6	4

- 6 Is the first number less than, equal to, or greater than the second number?
4,886 4,889

$$4,886 \bigcirc 4,889$$

A	=
B	<
C	>

- 7 Divide these numbers and find the remainder if any

A	B
6 remainder 2	7 remainder 5
C	D
3 remainder 1	11 remainder 2
E	F
8 remainder 2	8 remainder 0

- 8 Divide these numbers

A	B	C
323	723	283
D	E	F
403	243	123



Whole Numbers and Operations

- 9** Estimate the difference by rounding each number to the nearest 10

$$212 - 31 = ?$$

A 200	B 190
C 180	D 150

- 10** Estimate the product by rounding each number to its leading digit.

$$51 \times 2 = ?$$

A approx 102	B approx 10
C approx 100	D approx 150

- 11** Estimate the quotient by rounding each number to its leading digit.

$$6956 \div 701 = ?$$

A approx 100	B approx 11
C approx 20	D approx 10

- 12** Estimate the sum by rounding each number to the nearest 10

$$29 + 28 = ?$$

A 60	B 80
C 30	D 50

- 13** Figure out the answer by using the correct order of operations

$$(9 + 15) \div 6 + 2 \times 7 = ?$$

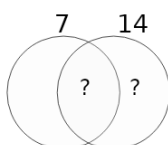
A 11	B 1	C 18
D 12	E 9	F 19

- 14** Find the answer when this number is raised to its exponent

$$5^3$$

A 8	B 5	C 125
D 128	E 122	F 3,125

- 15** Use the factor diagram to find the greatest common factor of these numbers.



A 15	B 5	C 7
D 3	E 11	F 42

- 16** Find the lowest common multiple of these numbers

$$11, 7$$

A 2	B 77	C 303
D 537	E 9	F 81



Whole Numbers and Operations

17 Find the greatest common factor of these numbers

10, 8, 6

A 4	B 13	C 2
D 1	E 15	F 5

18 Find the lowest common multiple of these numbers

6, 11, 8

A 27	B 135	C 127
D 128	E 264	F 90

19 Is this a prime or a composite number?

9

A Prime	B Composite
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20 What are the possible rational roots of this polynomial?
 $f(x) = 5x^4 + 25x^3 + 25x^2 - 25x - 30$

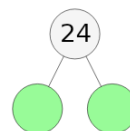
A $\frac{\text{factors of 30}}{\text{factors of 25}}$	B $\frac{\text{factors of 30}}{\text{factors of 5}}$
C $\frac{\text{factors of 25}}{\text{factors of 5}}$	D $\frac{\text{factors of 5}}{\text{factors of 30}}$

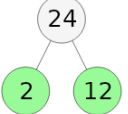
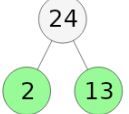
21 What is the digit '7' worth in this number?

6,274,252

A 7,000	B 7
C 70,000	D 700,000
E 7,000,000	F 70

22 Which is a valid factor pair for 24



A 	B 
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23 Convert this scientific notation number to regular notation

3×10^4

A 3,000,000	B 3,000
C 300,000	D 30,000

24 Multiply these numbers

435 x 4,221

A 1,964,664	B 1,487,269
C 1,872,858	D 4,656
E 1,836,135	F 18,361,350



Whole Numbers and Operations

25 33 cards are dealt evenly to 8 players. How many cards each (ignoring any remaining)?



33 cards 8 players

A



4 cards

B



3 cards

26 Order these numbers from lowest to highest

4,792

4,247

7,924

A 4247
4792
7924

B 7924
4247
4792

C 4792
7924
4247

27 Simplify the radical

$$\sqrt[3]{27}$$

A

4

B

$5\sqrt[3]{3}$

C

3

D

5

E

1

28 How can this perfect square be represented as a squared integer?

36

A

5^2

B

6^2

C

9^2

D

3^2

E

8^2

F

7^2

29 Round the number to the nearest hundred

269

A

360

B

0

C

300

D

270

E

600

F

160



Whole Numbers and Operations

30 Solve this problem:

20 apples are eaten by 4 koalas. How many apples does each koala eat if each koala eats the same number?

A 3	B -20	C 30
D 16	E 4	F 5

31 Subtract, regrouping across the zeros

$$200 - 122$$

A 78	B 130	C 104
D 88	E 182	F 68

32 Can 639 be divided by 9

639



9

A No
B Yes

33 Figure out the answer by using the correct order of operations

$$(4 + 2)^2 \div 2 + 5 \times 7 = ?$$

A 49	B 25	C 48
D 53	E 64	F 1

34 Find the expanded form of this number raised to its exponent

3^5

A $3 \times 3 \times 3 \times 3 \times 3 \times 3$	B $5 \times 5 \times 5$
C $3 \times 3 \times 3$	D $3 \times 3 \times 3 \times 3$
E $3 \times 3 \times 3 \times 3 \times 3$	F $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$

35 Multiply these numbers

$$\begin{array}{r} 8687 \\ \times 23 \\ \hline \end{array}$$

A 173,827	B 1,998,010
C 199,801	D 203,797
E 211,789	F 8,710

36 Divide these numbers and find the remainder if any

$$\begin{array}{r} 173 \\ 20 \overline{) } \end{array}$$

A 9 remainder 11	B 7 remainder 9
C 12 remainder 16	D 3 remainder 15
E 8 remainder 13	F 8 remainder 16



Whole Numbers and Operations

37 Divide these numbers

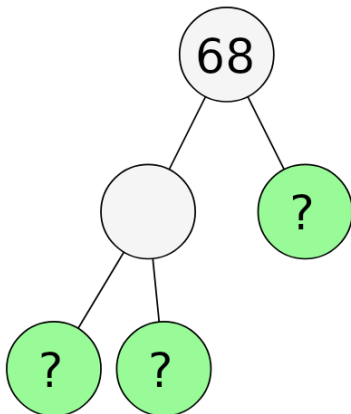
A 196	B 163	C 119
D 152	E 130	F 53

38 Multiply these numbers

$$\begin{array}{r} 985 \\ \times 15 \\ \hline \end{array}$$

A 1,478	B 12,559
C 12,411	D 147,750
E 1,000	F 14,775

39 Finish the factor tree to find the prime factorization of this number



A $2 \times 2 \times 2 \times 17$	B $2 \times 2 \times 17$	C $2 \times 2 \times 13 \times 17$
D $2 \times 2 \times 3 \times 17$	E $2 \times 2 \times 5 \times 17$	F $2 \times 2 \times 11 \times 17$

40 Expand this 7 digit number

4,000,011

A $40,000,000 + 10 + 1$	B $40,000,000 + 100 + 10$
C $4,000,000 + 100 + 1$	D $400,000 + 10 + 1$
E $4,000,000 + 10 + 1$	