Math 8IB   Name_____

Writing Equations

Write each as an equation.

1) n plus 11 is 35

   A) $\dfrac{n}{2} = 35$ B) $11^3 = 35$

   C) $n + 11 = 35$ D) $n \cdot 11 = 35$

2) n divided by 3 is 41

   A) $\dfrac{3}{n} = 41$ B) $\dfrac{n}{3} = 41$

   C) $3^3 \le 41$ D) $n - 3 = 41$

3) x increased by 10 is 20

   A) $x + 10 = 20$ B) $2 \cdot 10 = 20$

   C) $10 - x = 20$ D) $x^2 < 20$

4) 16 less than d is 27

   A) $16 - d \le 27$ B) $d - 16 = 27$

   C) $16 - d = 27$ D) $\dfrac{d}{16} = 27$

5) y minus 8 is 18

   A) $8 - y = 18$ B) $y^8 = 18$

   C) $8^2 = 18$ D) $y - 8 = 18$

6) n minus 19 is equal to 50

   A) $\dfrac{n}{19} = 50$ B) $n + 19 = 50$

   C) $n - 19 = 50$ D) $19^3 = 50$

7) the product of x and 11 is equal to 31

   A) $x \cdot 11 = 31$ B) $x + 11 = 31$

   C) $\dfrac{11}{x} = 31$ D) $x^{11} = 31$

8) n increased by 5 is equal to 30

   A) $\dfrac{5}{n} = 30$ B) $n^2 = 30$

   C) $5^3 = 30$ D) $n + 5 = 30$

9) m cubed is equal to 42

   A) $m^3 = 42$ B) $3m = 42$

   C) $\dfrac{3}{m} = 42$ D) $m + 3 = 42$

10) x decreased by 4 is 17

   A) $x^3 = 17$ B) $x \cdot 4 = 17$

   C) $4 - x = 17$ D) $x - 4 = 17$

11) x divided by 4 is equal to 41

   A) $4x = 41$ B) $\dfrac{4}{x} = 41$

   C) $\dfrac{x}{4} = 41$ D) $x^3 = 41$

12) n increased by 6 is 19

   A) $n + 6 = 19$ B) $n^3 = 19$

   C) $\dfrac{n}{2} = 19$ D) $2 \cdot 6 = 19$

13) half of x is equal to 5

   A) $2^2 \le 5$ B) $x^3 = 5$

   C) $\dfrac{2}{2} = 5$ D) $\dfrac{x}{2} = 5$

14) b times 7 is equal to 9

   A) $7^2 = 9$ B) $b \cdot 7 = 9$

   C) $7^b = 9$ D) $7^3 = 9$

15) the product of t and 7 is 32

   A) $\dfrac{7}{t} = 32$ B) $t \cdot 7 = 32$

   C) $\dfrac{t}{7} = 32$ D) $7^t = 32$

16) 24 less than y is 42

   A) $24 - y \le 42$ B) $y - 24 = 42$

   C) $y \cdot 24 = 42$ D) $y^{24} = 42$

17) x times 12 is 32

  A) $12^2 = 32$ B) $12 - x = 32$
  C) $x + 12 = 32$ D) $x \cdot 12 = 32$

18) n squared is 23

  A) $2n = 23$ B) $n^2 = 23$
  C) $\dfrac{n}{2} = 23$ D) $2^2 = 23$

19) n decreased by 23 is 37

  A) $2n = 37$ B) $n + 23 = 37$
  C) $23 - n = 37$ D) $n - 23 = 37$

20) 20 less than n is equal to 43

  A) $n + 20 = 43$ B) $n - 20 = 43$
  C) $20 - n = 43$ D) $20 - n > 43$

21) k divided by 8 is equal to 9

  A) $8 + k = 9$ B) $8^2 = 9$
  C) $\dfrac{k}{8} = 9$ D) $8 - k = 9$

22) n plus 6 is 23

  A) $n + 6 = 23$ B) $\dfrac{6}{n} = 23$
  C) $n - 6 \leq 23$ D) $6 - n = 23$

23) x times 9 is equal to 9

  A) $9^2 = 9$ B) $\dfrac{x}{9} = 9$
  C) $\dfrac{9}{2} = 9$ D) $x \cdot 9 = 9$

24) 2 to the a is equal to 46

  A) $a + 2 = 46$ B) $2^a = 46$
  C) $a^2 = 46$ D) $a + 2 \leq 46$

25) 15 to the n is 42

  A) $\dfrac{n}{2} = 42$ B) $15 - n = 42$
  C) $15^n = 42$ D) $15n \geq 42$

26) $y - 21 = 41$

  A) y to the 21th is 41
  B) the difference of y and 21 is 41
  C) y increased by 21 is 41
  D) the quotient of y and 21 is 41

27) $u \cdot 7 = 49$

  A) u times 7 is 49
  B) the sum of u and 7 is 49
  C) u more than 7 is 49
  D) u cubed is 49

28) $\dfrac{k}{2} = 25$

  A) 2 plus k is equal to 25
  B) half of 2 is equal to 25
  C) half of k is equal to 25
  D) k to the 2nd is equal to 25

29) $n + 10 = 45$

  A) n divided by 10 is 45
  B) n increased by 10 is 45
  C) twice 10 is 45
  D) 10 cubed is 45

30) $x^4 = 26$

  A) the difference of x and 4 is equal to 26
  B) the 4th power of x is equal to 26
  C) the x power of 4 is equal to 26
  D) x increased by 4 is equal to 26

31) $2v = 37$

  A) twice v is equal to 37
  B) the difference of v and 2 is equal to 37
  C) 2 decreased by v is equal to 37
  D) 2 minus v is equal to 37

32) $5^k = 11$

  A) 5 times k is equal to 11
  B) the 5th power of k is equal to 11
  C) 5 decreased by k is equal to 11
  D) the k power of 5 is equal to 11

33) $n \cdot 11 = 48$

   A) 11 plus n is 48
   B) the n power of 11 is 48
   C) n times 11 is 48
   D) n squared is 48

34) $\dfrac{p}{5} = 10$

   A) 5 cubed is equal to 10
   B) the quotient of p and 5 is equal to 10
   C) the difference of p and 5 is equal to 10
   D) the quotient of 5 and p is equal to 10

35) $w - 7 = 27$

   A) the w power of 7 is equal to 27
   B) the difference of w and 7 is equal to 27
   C) 7 plus w is equal to 27
   D) the 7th power of w is equal to 27

36) $c + 9 = 29$

   A) c divided by 9 is 29
   B) 9 less than c is 29
   C) c increased by 9 is 29
   D) c cubed is 29

37) $\dfrac{p}{8} = 28$

   A) p increased by 8 is equal to 28
   B) the sum of 8 and p is equal to 28
   C) the product of 8 and p is equal to 28
   D) the quotient of p and 8 is equal to 28

38) $x \cdot 5 = 34$

   A) the difference of x and 5 is equal to 34
   B) x times 5 is equal to 34
   C) 5 more than x is equal to 34
   D) the 5th power of x is equal to 34

39) $p + 9 = 14$

   A) the 9th power of p is 14
   B) 9 cubed is 14
   C) 9 divided by p is 14
   D) the sum of p and 9 is 14

40) $\dfrac{n}{2} = 13$

   A) the difference of 2 and n is 13
   B) the quotient of n and 2 is 13
   C) the quotient of 2 and n is 13
   D) n cubed is 13

41) $x - 14 = 24$

   A) the sum of 14 and x is equal to 24
   B) the 14th power of x is equal to 24
   C) 14 minus x is equal to 24
   D) x minus 14 is equal to 24

42) $x - 22 = 17$

   A) 22 less than x is 17
   B) 22 increased by x is 17
   C) x less than 22 is 17
   D) the quotient of 22 and x is 17

43) $x - 17 = 8$

   A) 17 times x is equal to 8
   B) the quotient of 17 and x is equal to 8
   C) x minus 17 is equal to 8
   D) 17 minus x is equal to 8

44) $n + 7 = 36$

   A) 7 to the n is equal to 36
   B) 7 minus n is equal to 36
   C) 7 divided by n is equal to 36
   D) 7 more than n is equal to 36

45) $x + 10 = 36$

   A) the quotient of 10 and x is 36
   B) 10 to the x is 36
   C) 10 squared is 36
   D) the sum of x and 10 is 36

46) $p - 10 = 46$

   A) the difference of 10 and p is equal to 46
   B) the difference of p and 10 is equal to 46
   C) the quotient of 10 and p is equal to 46
   D) the product of 10 and p is equal to 46

47) $w^3 = 33$

   A) the sum of 3 and w is equal to 33
   B) w times 3 is equal to 33
   C) 3 cubed is equal to 33
   D) w cubed is equal to 33

48) $x + 11 = 43$

   A) x increased by 11 is 43
   B) the x power of 11 is 43
   C) the product of x and 11 is 43
   D) x times 11 is 43

49) $r + 9 = 22$

   A) 9 more than r is 22
   B) twice r is 22
   C) the quotient of r and 9 is 22
   D) r times 9 is 22

50) $x^2 = 19$

   A) the product of 2 and x is equal to 19
   B) twice 2 is equal to 19
   C) 2 squared is equal to 19
   D) x squared is equal to 19

51) the difference of n and 3 is 14

52) d decreased by 13 is 5

53) twice p is equal to 7

54) x decreased by 9 is 19

55) the product of x and 8 is 32

56) x minus 7 is 50

57) k plus 5 is 21

58) the quotient of n and 7 is 12

59) d plus 10 is 9

60) the sum of y and 6 is equal to 32

61) n plus 7 is equal to 17

62) q times 6 is equal to 33

63) the x power of 5 is equal to 23

64) x increased by 11 is equal to 10

65) r divided by 3 is 10

66) the sum of k and 8 is 18

67) w decreased by 8 is 35

68) k decreased by 18 is 49

69) n times 9 is equal to 33

70) x divided by 5 is 11

71) the 3rd power of w is equal to 25

72) the 9th power of n is equal to 22

73) n plus 8 is 20

74) p increased by 12 is 44

75) n increased by 9 is equal to 21

76) the sum of x and 12 is 48

77) y increased by 5 is 16

78) the difference of q and 6 is 28

79) k minus 3 is 36

80) half of t is 46

81) m cubed is equal to 45

82) the product of m and 12 is 16

83) n divided by 4 is equal to 42

84) the quotient of c and 6 is equal to 27

85) the difference of c and 4 is equal to 45

86) the sum of w and 9 is 50

87) x times 10 is 24

88) the difference of y and 12 is 13

89) the 10th power of x is equal to 9

90) d times 11 is equal to 45

91) m minus 14 is 39

92) x minus 4 is 6

93) x plus 11 is equal to 23

94) the difference of n and 11 is equal to 44

95) n increased by 6 is equal to 18

96) m minus 12 is equal to 38

97) n to the 10th is equal to 8

98) w minus 24 is equal to 22

99) x decreased by 10 is 33

100) k to the 7th is equal to 31

Answers to Writing Equations (ID: 1)

1) C 2) B 3) A 4) B
5) D 6) C 7) A 8) D
9) A 10) D 11) C 12) A
13) D 14) B 15) B 16) B
17) D 18) B 19) D 20) B
21) C 22) A 23) D 24) B
25) C 26) B 27) A 28) C
29) B 30) B 31) A 32) D
33) C 34) B 35) B 36) C
37) D 38) B 39) D 40) B
41) D 42) A 43) C 44) D
45) D 46) B 47) D 48) A
49) A 50) D 51) $n - 3 = 14$ 52) $d - 13 = 5$
53) $2p = 7$ 54) $x - 9 = 19$ 55) $x \cdot 8 = 32$ 56) $x - 7 = 50$
57) $k + 5 = 21$ 58) $\dfrac{n}{7} = 12$ 59) $d + 10 = 9$ 60) $y + 6 = 32$

61) $n + 7 = 17$ 62) $q \cdot 6 = 33$ 63) $5^x = 23$ 64) $x + 11 = 10$
65) $\dfrac{r}{3} = 10$ 66) $k + 8 = 18$ 67) $w - 8 = 35$ 68) $k - 18 = 49$
69) $n \cdot 9 = 33$ 70) $\dfrac{x}{5} = 11$ 71) $w^3 = 25$ 72) $n^9 = 22$

73) $n + 8 = 20$ 74) $p + 12 = 44$ 75) $n + 9 = 21$ 76) $x + 12 = 48$
77) $y + 5 = 16$ 78) $q - 6 = 28$ 79) $k - 3 = 36$ 80) $\dfrac{t}{2} = 46$

81) $m^3 = 45$ 82) $m \cdot 12 = 16$ 83) $\dfrac{n}{4} = 42$ 84) $\dfrac{c}{6} = 27$

85) $c - 4 = 45$ 86) $w + 9 = 50$ 87) $x \cdot 10 = 24$ 88) $y - 12 = 13$
89) $x^{10} = 9$ 90) $d \cdot 11 = 45$ 91) $m - 14 = 39$ 92) $x - 4 = 6$
93) $x + 11 = 23$ 94) $n - 11 = 44$ 95) $n + 6 = 18$ 96) $m - 12 = 38$
97) $n^{10} = 8$ 98) $w - 24 = 22$ 99) $x - 10 = 33$ 100) $k^7 = 31$