数学テスト No.2 こたえ

単項式の乗法と除法, 式の値

日付:_____

点数:____

次の計算をしなさい.

1.
$$ab \times 5a^2 = \frac{5a^3b}{}$$

$$2. 18xy \times \left(-\frac{1}{3}x\right) = -6x^2y$$

3.
$$15a^2b \div (-3ab) = -5a$$

4.
$$(3x)^2 \div \frac{1}{2}xy \times y = 72x$$

5.
$$3ab \div 2a \times (-4a^2b) = -6a^2b^2$$

6.
$$-6a^2b \div \frac{2}{3}a \div (-b)^2 = -\frac{9a}{b}$$

7.
$$a \times b^2 \div ab = \frac{b}{b}$$

8.
$$(-5m)^2 = 25m^2$$

9.
$$8a \times (-a^2) = -8a^3$$

10.
$$\frac{3}{4}b^2c \div \frac{5}{8}bc^2 = \frac{6b}{5c}$$

11.
$$6xy \div \frac{2}{3}y = 9x$$

12.
$$\frac{1}{2}x^2y \div \left(-\frac{1}{4}xy^2\right) = -\frac{2x}{y}$$

13. a=5, b=-1 のとき、次の式の値を求めなさい。

(a)
$$3a + 5b = 3 \times 5 + 5 \times (-1) = 10$$

(b)
$$5(a-3b)+4(-2a+5b)=-3a+5b=-3\times 5+5\times (-1)=-20$$

(c)
$$9a^3b \div (-3a^2) = -3ab = -3 \times 5 \times (-1) = 15$$

(d)
$$8ab^2 \div 4b = 2ab = 2 \times 5 \times (-1) = -10$$

14. $x=-3,y=rac{1}{2}$ のとき,次の式の値を求めなさい.

(a)
$$\frac{1}{2}(2x-6y)-(x+y)=-4y=-4\times\frac{1}{2}=-2$$

(b)
$$16x^3y^2 \div (-2x^3y) = -16y = -16 \times \frac{1}{2} = -4$$

15. x, y が次の値の時, $x^2 + 4y$ の値を求めなさい.

(a)
$$x = 3, y = 2$$
 $9 + 8 = 17$

(b)
$$x = -4, y = -3$$
 $16 - 12 = 4$