Regents Exam Questions A.APR.A.1: Division of Powers 1b www.jmap.org

A.APR.A.1: Division of Powers 1b

- 1 How many times larger than $\frac{1}{4}x$ is 5x?
- 2 What is half of 2^6 ?
- 3 What is one-third of 3^6 ?
- 4 The quotient of $-\frac{15x^8}{5x^2}$, $x \neq 0$, is
- 5 The expression $\frac{-32x^8}{4x^2}$, $x \neq 0$, is equivalent to
- 6 When $-9x^5$ is divided by $-3x^3$, $x \neq 0$, the quotient is
- 7 Which expression represents $\frac{(2x^3)(8x^5)}{4x^6}$ in simplest form?
 - 0 3

- 9 Which expression represents $\frac{27x^{18}y^5}{9x^6y}$ in simplest form?
- 10 The expression $\frac{24x^6y^3}{-6x^3y}$ is equivalent to
- 11 Which expression represents $\frac{-14a^2c^8}{7a^3c^2}$ in simplest form?

12 The expression
$$\frac{5x^6y^2}{x^8y}$$
 is equivalent to

13 The expression
$$\frac{4x^2y^3}{2xy^4}$$
 is equivalent to

14 The product of $\frac{4x^2}{7y^2}$ and $\frac{21y^3}{20x^4}$, expressed in simplest form, is

15 Simplify:
$$\frac{27k^5m^8}{(4k^3)(9m^2)}$$

8 The expression
$$\frac{12w^3y^3}{-3w^3y^3}$$
 is equivalent to

Name:

A.APR.A.1: Division of Powers 1b Answer Section

1 ANS: 20 $\frac{5}{\frac{1}{4}} = 20$ REF: 080213a 2 ANS: 2⁵ $\frac{2^6}{2^1} = 2^5$ REF: 060813ia 3 ANS: 3⁵ $\frac{3^6}{3^1} = 3^5$ REF: 061219ia 4 ANS: $-3x^{6}$ REF: 060005a 5 ANS: $-8x^{6}$ REF: 060707a 6 ANS: $3x^2$ REF: 080405a 7 ANS: $4x^2$ $\frac{(2x^3)(8x^5)}{4x^6} = \frac{16x^8}{4x^6} = 4x^2$ REF: fall0703ia 8 ANS: $-4w^{6}$ REF: 061103ia

9	ANS: $3x^{12}y^4$
10	REF: 060903ia ANS: $-4x^3y^2$
11	REF: 011503ia ANS: $\frac{-2c^{6}}{a}$
12	REF: 061018ia ANS: $\frac{5y}{x^2}$
13	REF: 080526a ANS: $\frac{2x}{y}$
14	REF: 010817a ANS: $\frac{3y}{5x^2}$
15	REF: 081311ia ANS: $\frac{3k^2m^6}{4}$
	DEE. 010022:-

REF: 010932ia