

Practice 1 for E22
CM/M12

1. Which expression is equivalent to $(5^{-2}a^3b^{-4})^{-1}$?

1. $\frac{10b^4}{a^3}$

2. $\frac{25b^4}{a^3}$

3. $\frac{a^3}{25b^4}$

4. $\frac{a^2}{125b^5}$

2. Simplify: $\left(\frac{9x^2z^4}{49x^{-2}}\right)^{\frac{1}{2}}$

1. $\frac{9.5xz^2}{24.5x^{-1}}$

2. $\frac{3xz^2}{7x^{-1}}$

3. $\frac{3xz^2}{7x}$

4. $\frac{3x^2z^2}{7}$

3. What is the product of $-3x^2y$ and $(5xy^2 + xy)$?

1. $-15x^3y^3 - 3x^3y^2$

2. $-15x^3y^3 - 3x^3y$

3. $-15x^2y^2 - 3x^2y$

4. $-15x^3y^3 + xy$

4. Evaluate: $-10x^0$

1. 10 2. -10

3. $-10x$ 4. $10/x$

5. Solve for c when,

$$a = \frac{b + 2c - d}{3}$$

6. Solve for x.

$$\sqrt{3x + 3} + 1 = x + 3$$

7. Let circle O be described by

$$(x - 3)^2 + (y + 1)^2 = 4$$

Find the center and radius of the circle.