ANSWERS

1)
$$I = 6$$
, $R = 40n^7$

2)
$$I = 2$$
, $R = 448$

3) $\frac{5}{9}$

4) -4

5) $2xy^3z^4$

Evaluate Radicals

6)
$$(x - y)^3$$

7) No real solution

8) $-x^4$

NOT $x^3 - y^3$

Even index cannot be negative radicand

CANNOT distribute exponent over subtraction

Approximate Radicals

9) Between $\sqrt{25}$ and $\sqrt{36}$ between 5 and 6, closer to 6

10) Between $\sqrt[3]{-8}$ and $\sqrt[3]{-27}$

between -2 and -3, closer to -2

ANSWERS

1) 4√5

2) 5√15

Simplify Radicals

3) $\frac{1}{4}$

4) $\frac{\sqrt{2}}{4}$

5) −80*v*√6*v*

6) $9m^2n^5\sqrt{2m}$

7) 2³√10

8) $30m\sqrt[3]{m^2}$

9) 24³√6n

10) $3x^5\sqrt[3]{2}$

Answers to 12.2 Operations with Radicals Quiz (ID: 1)

1)
$$-9\sqrt{3}$$
 2) $12\sqrt{5} + 6\sqrt{3}$ 3) 14
5) $20\sqrt{2} + 8\sqrt{6}$ 6) $5\sqrt{7}v + 7v\sqrt{3}$ 7) $\frac{2\sqrt{7}}{7}$

2)
$$12\sqrt{5} + 6\sqrt{3}$$

7)
$$\frac{2\sqrt{7}}{7}$$

4)
$$252x^2 \sqrt{8}$$

8) $\frac{\sqrt{15n}}{5}$

#1-2: Add/subtract radicals

#3-4: multiply radicals

#5-6: distribute radicals

#7-8: divide radicals (including rationalize the denominator)