

**Evaluate the expressions. Show ALL work! Circle your answers.**

1) $9^{\frac{3}{2}}$	2) $(-8)^{\frac{2}{3}}$	3) $(49)^{-\frac{1}{2}}$
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**Simplify the Expression into simplest form- Show ALL work! Circle your answers.**

4) $\left(\frac{2x^2}{13}\right)^0$	5) $(2x^{-3})(5x)$	6) $\frac{(x^4)^3}{(x^2)^5}$
7) $\sqrt{20x^5y^4}$	8) $\sqrt[3]{\frac{8x^6}{27x^3}}$	9) $\frac{x^8}{10y} \cdot \frac{5y^2}{x^3}$
10) $\sqrt[4]{32x^{11}}$	11) $\sqrt{(x+1)^3}$	12) $i^{13}$

**Perform the given operation.**

13) $(-6 + 3i) + (5i + 7)$	14) $(4 + 3i) - (2 - 4i)$
15) $(1 - 3i)(2 - 5i)$	16) $2\sqrt{-24} - \sqrt{-54} + 3\sqrt{-96}$

**17) Which of the following is equivalent to  $x^8$ . Circle *all* that apply**

$x^4 \cdot x^2$	$x^3 \cdot x^5$	$x^4 \cdot x^4$	$\frac{1}{x^8}$	$x^2 \cdot x^2 \cdot x^2$
$x^8 \cdot x$	$x^8 \cdot x^0$	$(x^2)^3$	$(x^4)^2$	$(x^6)^2$