Factor each polynomial, if possible. If the polynomial cannot be factored, write prime.

1. $x^{2}-121$
2. $-36 x^{2}+1$

Solve each equation by factoring.
3. $4 c^{2}=49$
4. $25 x^{3}-9 x=0$

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5. A square with sides of length $b$ is removed from a square with sides of length 8 . Write an expression to compare the area of the remaining figure to the area of the area of the original square.


Which of the following is not a solution of $x^{3}=\frac{1}{4} x$ ?
(A) $\frac{1}{16}$
(B) $\frac{1}{2}$
(C) 0
(D) $-\frac{1}{2}$

## ANSWERS

1. $(x+11)(x-11)$
2. $\left\{-\frac{3}{5}, 0, \frac{3}{5}\right\}$
3. $(1+6 x)(1-6 x)$
4. $\frac{64-b^{2}}{64}$
5. A
