1. Elementary numerical and algebraic operations.
$\frac{c}{d}+2=$
a. $\frac{c+2 d}{d}$
b. $\frac{c+2}{d+2}$
c. $\frac{c+2}{d}$
d. $c+2 d$
e. $c$
2. Operations with fractional exponents and radicals.
$\sqrt{3}+\sqrt{27}=$
a. 6
b. $3 \sqrt{3}$
c. $4 \sqrt{3}$
d. $10 \sqrt{3}$
e. $\sqrt{30}$
3. Linear functions and equations.

If $3 x+2 y=8$ and $y=x-1$, then $x=$
a. -6
b. 6
c. 7
d. 9
e. 2
4. Polynomial functions and equations.

One of the roots of $(x-2)(3 x+4)=0$ is
a. -2
b. $-\frac{4}{3}$
c. $-\frac{3}{4}$
d. $\frac{3}{4}$
e. $\frac{4}{3}$
5. Inequalities and absolute value.

The inequality $7-2 x<1$ is equivalent to
a. $x<3$
b. $x>3$
c. $x<-4$
d. $x>-4$
e. $x<8$
6. Graphing

Which of the following is an equation of a line with slope 3 and $y$-intercept -4 ?
a. $y=1 x-4$
b. $y=3 x-4$
c. $y=3 x+4$
d. $y=4 x-3$
e. $y=4 x+3$

## 7. Word problems.

A student who correctly answered 72 questions on a test received a score of $75 \%$. How many questions were on the test?
a. 54
b. 72
c. 75
d. 96
e. 104

ANSWERS:

1. a; 2. c; 3. e; 4. b; 5. b; 6. b; 7.d.
