Name
Date
Course

Inequalities and Equations with Decimals (Homework)

Solve. You may use a calculator. Round to the nearest thousandth if necessary.

① $2.3x-4=-1.8x+2.3$ — $x\approx 1.537$

② $\frac{y}{1.3}-6=-4.7$ — $y=1.69$

③ $-7.7z+2.5z+1=3.8-1.6z$ — $z\approx -0.778$

④ $6.6=\frac{x}{-2}+5.9$ — $x=-1.4$

⑤ $4-\frac{y}{0.5}=-3.68-2.1$ — $y=4.89$

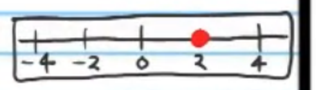
⑥ $0.004z-0.01z-6=2.03z$ — $z\approx -2.947$

⑦ $2.2(4.1x+3)=-2(-3x+0.9)$ — $x\approx -2.781$

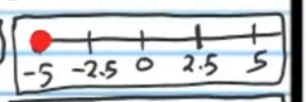
⑧ $7.5-(3-4x)=2-1.1(4.6x+2.7)$ — $x\approx -0.604$

Find the algebraic solutions and graphical solutions of the following equations.

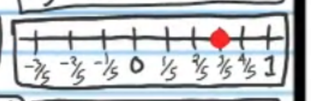
⑨ $1=4x-7$ — $x=2$



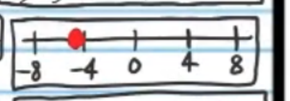
⑩ $-5z+4z=7-2$ — $z=-5$



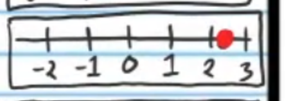
⑪ $-3=-5y$ — $y=3/5$



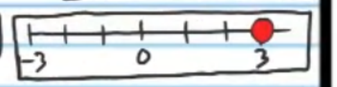
⑫ $1.8=\frac{x}{-2}-0.4$ — $x=-4.4$



⑬ $5-\frac{y}{0.6}=1$ — $y=2.4$



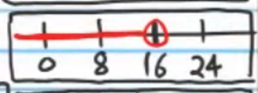
⑭ $4=-2x-2x+16$ — $x=3$



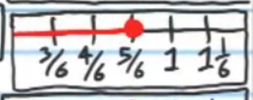
Find the algebraic solutions and graphical solutions of the following inequalities.

⑮ $-2+5x\geq 13+2x$ — $x\geq 5$

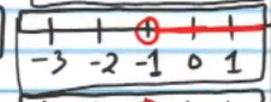
⑯ $-3+1<\frac{y}{-4}+2$ — $16>y$



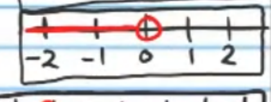
⑰ $3(2x-4)\leq 1-8$ — $x\leq 5/6$



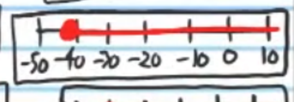
⑱ $-7z-3z+1<-8z+3$ — $z>-1$



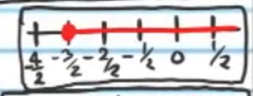
⑲ $-3x+x-7+5x<2x-7$ — $x<0$



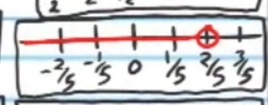
⑳ $4-8+1\leq\frac{z}{3}+11$ — $-42\leq z$



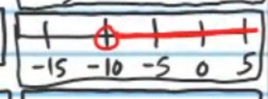
㉑ $6x-9x-2x-4\leq 2-6x+x+4x$ — $-3/2\leq x$



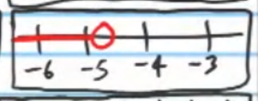
㉒ $3+5y-8y>2y+1$ — $y<2/5$



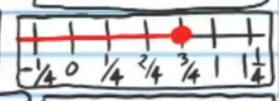
㉓ $\frac{x}{-5}+2<4$ — $x>-10$



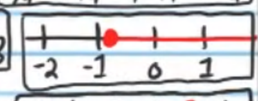
㉔ $-1>3+\frac{y}{1.2}$ — $-4.8>y$



㉕ $6+2(z-3)\geq 3(2z-1)$ — $z\leq\frac{3}{4}$



㉖ $-3+4(-2x-2)\leq 1+(-5)$ — $x\geq -7/8$



㉗ $-(3-2y)<4y-9y$ — $3/7>y$