

Please do not write on this sheet PS K

pg 59 problem 14, 15

14a.

$3x + 5 = 20$ $-5 \quad -5$ $3x = 15$ $\frac{3x}{3} = \frac{15}{3}$ $x = 5$	Check: $3(5) + 5 = 20$ $15 + 5 = 20$ $20 = 20$ $\odot$
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14b.

$3x - 5 = 20$ $+5 \quad +5$ $3x = 25$ $\frac{3x}{3} = \frac{25}{3}$ $x = 8\frac{1}{3}$	Check: $3\left(8\frac{1}{3}\right) - 5 = 20$ $25 - 5 = 20$ $20 = 20$ $\odot$
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14c.

$3x + 5 = -20$ $-5 \quad -5$ $3x = -25$ $\frac{3x}{3} = \frac{-25}{3}$ $x = -8\frac{1}{3}$	Check: $3\left(-8\frac{1}{3}\right) + 5 = -20$ $-25 + 5 = -20$ $-20 = -20$ $\odot$
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14d.

$-3x - 5 = 20$ $3x - 5 + 5 = 20 + 5$ $-3x = 25$ $\frac{-3x}{-3} = \frac{25}{-3}$ $x = -8\frac{1}{3}$	Check: $-3\left(-8\frac{1}{3}\right) - 5 = 20$ $25 - 5 = 20$ $20 = 20$ $\odot$
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14e.

$-3x - 5 = -20$ $-3x - 5 + 5 = -20 + 5$ $-3x = -15$ $\frac{-3x}{-3} = \frac{-15}{-3}$ $x = 5$	Check: $-3(5) - 5 = -20$ $-15 - 5 = -20$ $-20 = -20$ $\odot$
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pg 59 problem 15

15a.

$3(x + 2) = 12$ $3x + 6 = 12$ $3x + 6 - 6 = 12 - 6$ $3x = 6$ $\frac{3x}{3} = \frac{6}{3}$ $x = 2$	Check: $3(2 + 2) = 12$ $3(4) = 12$ $12 = 12$ $\odot$
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15b.

$3(x + 2) = x - 18$ $3x + 6 = x - 18$ $3x + 6 - 6 = x - 18 - 6$ $3x = x - 24$ $3x - x = x - x - 24$ $2x = -24$ $\frac{2x}{2} = \frac{-24}{2}$ $x = -12$	Check: $3(-12 + 2) = -12 - 18$ $3(-10) = -30$ $-30 = -30$ $\odot$
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15c.

$3(x + 2) = 2x$ $3x + 6 = 2x$ $3x - 2x + 6 = 2x - 2x$ $x + 6 = 0$ $x + 6 - 6 = 0 - 6$ $x = -6$	Check: $3(-6 + 2) = 2(-6)$ $3(-4) = 2(-6)$ $-12 = -12$ $\odot$
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15d.

$3(x + 2) = -15$ $3x + 6 = -15$ $3x + 6 - 6 = -15 - 6$ $3x = -21$ $\frac{3x}{3} = \frac{-21}{3}$ $x = -7$	Check: $3(-7 + 2) = -15$ $3(-5) = -15$ $-15 = -15$ $\odot$
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