

Final Exam Review from 1-1, 1-7, 2(5-6)

Translate each phrase or sentence into the most accurate expression or equation. Let x = the number

- 1) The sum of a number and twelve $x + 12$
- 2) The product of ten and a number $10x$
- 3) The quotient of one and a number decreased by six $\frac{1}{x} - 6$
- 4) A number more than negative eight $-8 + x$
- 5) Six times the difference of a number and two $6(x - 2)$

Simplify each expression. Box final answers.

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| 6) $3(4x - 7)$ | 7) $4x + 7y + 11x - 12y$ | 8) $2(x + 3) + 7$ |
| $12x - 21$ | $15x - 5y$ | $2x + 13$ |

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|------------------|-----------------------------|----------------------------|
| 9) $-11(6 - 5x)$ | 10) $\frac{1}{2}(8x + 12y)$ | 11) $x + 7 - 2y + 3x + 6y$ |
| $-66 + 55x$ | $4x + 6y$ | $4x + 4y + 7$ |

Simplify. NO DECIMALS! Answers can be integers, reduced fractions or mixed numbers. State LCD on #12-14. Only work with improper fractions.

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| 12) $\frac{3}{4} + (-\frac{1}{2})$ | 13) $(-\frac{1}{3}) + (-\frac{7}{8})$ | 14) $9\frac{1}{4} - 5\frac{3}{8}$ |
| $\frac{1}{4}$ | $-1\frac{5}{24}$ | $3\frac{7}{8}$ |

YOU MUST SHOW ALL WORK LIKE WE DID IN THE NOTES!

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| 15) $(-\frac{1}{5}) + (-\frac{3}{8})$ | 16) $(-\frac{5}{8}) \div \frac{5}{6}$ | 17) $\frac{2}{3} \cdot \frac{3}{8}$ |
| $-\frac{23}{40}$ | $-\frac{3}{4}$ | $\frac{1}{4}$ |