

Improvements Needed

- $58 \times 413 =$
Factor 58 to 29×2 , and $29 = 30 - 1$. Multiply 413 by 30, then -413, and lastly double the number.
- $1\frac{4}{5} + 1\frac{3}{9} = \checkmark$
add the whole number, and add fractions, and lastly convert that to rational number
- If $A = 30, B = 102$ and $C = 6$, then $AB \div C^2 =$
Remove the C's factor from smaller number A and then the other number B
- if $7x + 34 = 223$, then $x =$
 $223 - 34$: single digit is different by 1, then the result is (10-1).
- The legs of a right triangle are 7. and 24. Its perimeter is ?
Often in time the hypotenuse is just one larger than larger leg
3, 4, \rightarrow 5
5, 12, \rightarrow 13
8, 15, \rightarrow 17
7, 24, \rightarrow 25
9, 40, \rightarrow 41
- Large Number multiplying
 - factorize one of multiplier and multiple one factor at a time:
 $\underline{48 \times 271}$
factorize 48 and multiple the largest factor first: $271 \times 3 \times 2 \times 2 \times 2 \times 2$
 - find the closest good number and offset from the number $\underline{74 \times 281}$
74 is broken into $75 - 1$: $281 \times 75 - 281 = 28100 \times \frac{3}{4} - 281$
- Approximation
 - : Round the number with less than 1% error
 $\underline{806 \times 831}$
change 806 to 800 and 831 to 830: 800×830
 - round the number if less than 10% and add or subtract the error percentage
 $\underline{85587 \times 813}$
 $85587 = 80000 + 7\%$,
 $813 = 800 + 2\%$.
 $\rightarrow 80000 \times 800 + 9\%$
 $= 64,000,000 + 9\% \approx 64,000 + 10\% = 70,400$