

# CUT & PASTE Puzzle

## THE INTEGER PUZZLE

**A**  $-3 \times 9$   
 $-30 \div -9$   $13$   
 $19$

**B**  $-7 + (-3)$   
 $7 - x - 5$   $3$   
 $-16$

**C**  $-6 - 1$   
 $2 - 01 -$   $7$   
 $-17$

**D**  $01 - x - 2$   $12$   
 $-8$

**E**  $-2 + (-9)$   $(2)$   
 $-37$

**F**  $-5 \times -5$   $5 \times 8$   $21$   
 $27$

**G**  $4 \times -4$   $-12$   
 $2 \div 81 -$

**H**  $32 \div -8$   $16$   
 $7 - \div 82 -$   $10$   
 $55 \div -11$

# Operations with INTEGERS

Created by: ALL THINGS ALGEBRA®

# OPERATIONS WITH INTEGERS

## Notes & Cut-Out Puzzle!

**Notes:** Students review the basic operation rules for integers through Cornell Notes.

|  |  |
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| Name: _____ Date: _____  |  |
| Topic: _____ Class: _____  |  |
| <p><b>Main Ideas/Questions</b></p> <p><b>Adding Integers</b></p> <p>To <b>ADD</b> means to move _____ on the number line!</p> <p>Visual Example: <math>-3 + 8 =</math> _____</p> <p>More Examples: 1. <math>1 + 8 =</math> _____ 2. <math>-11 + 9 =</math> _____<br/>           3. <math>-2 + 4 =</math> _____ 4. <math>-7 + 7 =</math> _____<br/>           5. <math>-21 + 3 =</math> _____ 6. <math>-9 + 13 =</math> _____</p> | <p><b>Notes/Examples</b></p> <p>To <b>SUBTRACT</b> means to move _____ on the number line!</p> <p>Visual Example: <math>-1 - 3 =</math> _____</p> <p>More Examples: 7. <math>9 - 4 =</math> _____ 8. <math>-2 - 5 =</math> _____<br/>           9. <math>4 - 6 =</math> _____ 10. <math>-3 - 3 =</math> _____<br/>           11. <math>-28 - 8 =</math> _____ 12. <math>-5 - 11 =</math> _____</p>   |
| <p>Watch out for Double Signs!</p>   | <p>Rewrite "<math>-(-)</math>" as _____.</p> <p>Rewrite "<math>-(-)</math>" as _____.</p> <p>Examples: 13. <math>2 + (-6) =</math> _____ 14. <math>-7 + (-1) =</math> _____<br/>           15. <math>-20 + (-5) =</math> _____ 16. <math>18 + (-2) =</math> _____<br/>           17. <math>-15 + (-14) =</math> _____ 18. <math>1 + (-7) =</math> _____<br/>           19. <math>9 - (-2) =</math> _____ 20. <math>-12 - (-3) =</math> _____<br/>           21. <math>0 - (-10) =</math> _____ 22. <math>-6 - (-19) =</math> _____<br/>           23. <math>-2 - (-23) =</math> _____ 24. <math>21 - (-7) =</math> _____</p> |

  

|  |  |
|--|--|
| <p><b>Absolute Value Examples</b></p> <p>25. <math> -13  +  9  =</math> _____ 26. <math> 23 + 15  =</math> _____<br/>           27. <math> 21 - 8  =</math> _____ 28. <math> 24 - (-17)  =</math> _____<br/>           29. <math> 3 + 2  =</math> _____ 30. <math> 11 - 4  =</math> _____<br/>           31. <math>7  8  =</math> _____ 32. <math>4 - 4 =</math> _____<br/>           33. <math>-14 - (-7) =</math> _____ 34. <math> 5 - (-8)  =</math> _____</p>  | <p><b>Rules for Multiplying &amp; Dividing Integers</b></p> <p>Multiply or divide as you normally would, but use the following rules for the final sign:</p> <ul style="list-style-type: none"> <li>Two Positives (+ and +) make a _____.</li> <li>Two Negatives (- and -) make a _____.</li> <li>A Positive and a Negative (+ and -) make a _____.</li> </ul> |
| <p><b>Multiplying Integers</b></p> <p>35. <math>-9 \times -3 =</math> _____ 36. <math>-4 \times -11 =</math> _____<br/>           37. <math>6(9) =</math> _____ 38. <math>-6(10) =</math> _____<br/>           39. <math>-4(7) =</math> _____ 40. <math>6(8) =</math> _____<br/>           41. <math>11 \cdot -2 =</math> _____ 42. <math>-8 \cdot -3 =</math> _____<br/>           43. <math>-5 \cdot 9 =</math> _____ 44. <math>16 \cdot -2 =</math> _____<br/>           45. <math>63 \div 7 =</math> _____ 46. <math>-18 \div -9 =</math> _____<br/>           47. <math>-9 \div -3 =</math> _____ 48. <math>20 \div 2 =</math> _____<br/>           49. <math>90/10 =</math> _____ 50. <math>56/-8 =</math> _____<br/>           51. <math>-8/8 =</math> _____ 52. <math>-21/-3 =</math> _____<br/>           53. <math>-42/7 =</math> _____ 54. <math>12/-1 =</math> _____</p> |  |

**Puzzle Activity:** Students simplify the problems around the edges of the individual squares by performing the operations. Then, they cut out their pieces and rearrange them so that their edges match. They paste them onto a template. The puzzle, template, and solution are included.

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|--|---|--|--|
| Name: _____ Date: _____ Per: _____   |   |  |  |
| <b>THE INTEGER PUZZLE!</b>   |   |  |  |
| <p><math>-3 \times 9</math></p> <p><b>A</b></p> <p><math>19</math></p> <p><math>-2 + (-9)</math></p>   | <p><math>-7 + (-3)</math></p> <p><b>B</b></p> <p><math>-16</math></p> <p><math>-5 \times -5</math></p>    | <p><math>-6 - 1</math></p> <p><b>C</b></p> <p><math>-17</math></p> <p><math>4 \times -4</math></p> | <p><math>-14 - (-5)</math></p> <p><b>D</b></p> <p><math>-8</math></p> <p><math>32 \div -8</math></p> |
| <p><math>18 \div (-2)</math></p> <p><b>E</b></p> <p><math>15</math></p> <p><math>-4 - (-1)</math></p>  | <p><math>7 \div 8 \times 5</math></p> <p><b>F</b></p> <p><math>-11</math></p> <p><math>-10 + 2</math></p> | <p><math>12</math></p> <p><b>G</b></p> <p><math>27</math></p> <p><math>2 \times 3</math></p>       | <p><math>-13</math></p> <p><b>H</b></p> <p><math>10</math></p> <p><math>55 \div -11</math></p>       |
| <p><math>2 \times 12</math></p> <p><b>I</b></p> <p><math>-2</math></p> <p><math>-33 \div -3</math></p> | <p><math>11 \div (-2)</math></p> <p><b>J</b></p> <p><math>25</math></p> <p><math>17 - (-2)</math></p>     | <p><math>81</math></p> <p><b>K</b></p> <p><math>-5</math></p> <p><math>-14 \div 7</math></p>       | <p><math>1</math></p> <p><b>L</b></p> <p><math>-10</math></p> <p><math>12 + 5</math></p>             |
| <p><math>5 \div (-3)</math></p> <p><b>M</b></p> <p><math>-3</math></p>                                 | <p><math>4</math></p> <p><b>N</b></p> <p><math>-4</math></p>  | <p><math>4</math></p> <p><b>O</b></p> <p><math>-7</math></p>                                       | <p><math>12 \div 8</math></p> <p><b>P</b></p> <p><math>-27</math></p>                                |
| <p><b>THE INTEGER PUZZLE!</b></p>  |   | <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>                                   |  |