

Math 6

UNIT 1 – Interactive Notebook

1-1 Ratios

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| **Name:** |  | **Date:** |  |

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| **Common Core Standards** | [CCSS.MATH.CONTENT.6.RP.A.1](http://www.corestandards.org/Math/Content/6/RP/A/1/) Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."* |

* 1. Ratios

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| What is the ratio of circles to squares? | **4:3** |
| What is the ratio of A*s* to B*s*?  **ABBBBABA**  **BBBBBABB** | **4:12** |
| What is the ratio of hearts to stars? | **3:7** |

How do we know that ratios are EQUAL?

Example: Are the ratios 4:1 and 12:3 equal?

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| **Step 1:**  Find the quotient of the numbers in the ratio. | **4 1 = 4 12 3 = 4** |
| **Step 2:**  If the quotients are the **SAME**, then ratios are **EQUAL**! | **4 : 1** = **12 : 3** |

Give three equal ratios for the following.

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| **3:2** |  | **4:1** |  |  |
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Task Cards

Match the pink card with the blue card.

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| |  | | --- | | **1.** | | **The ratio of 1*s* to 8*s*.**  **188811**  **888188** | |  | |  | | --- | | **a.** | | **2:3** | |
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| |  | | --- | | **2.** | | **Reduce to lowest term**  **24:32** | |  | |  | | --- | | **b.** | | **3:1** | |

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| **3.** |
| **Equal ratio to**  **5:6** |

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| **c.** |
| **3:4** |

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| |  | | --- | | **4.** | | **In a neighborhood for every 6 old homes there were 9 new homes. What is the ratio of old homes to new homes?** | |  | |  | | --- | | **d.** | | **1:2** | |
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| |  | | --- | | **5.** | | **The ratio of ribbons to hearts.** | |  | |  | | --- | | **e.** | | **15:18** | |
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| |  | | --- | | **6.** | | **The ratio of M*s* to N*s.***  **NNMN**  **NMNN** | |  | |  | | --- | | **f.** | | **2:1** | |
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| |  | | --- | | **7.** | | **Reduce to lowest term.**  **64:32** | |  | | |  | | --- | | **g.** | | **6:21** | | |
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| |  | | --- | | **8.** | | **Equal ratio to**  **2:7** | | |  | | |  | | --- | | **h.** | | **1:3** | | |
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|  | **ANSWER KEY** | |
|  | **Problem 1** | **Answers may vary**  **6:4, 9:6, 12: 8… etc** |
|  | **Problem 2** | **Answers may vary**  **8:2, 12:3, 16:4… etc** |
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|  | **Task Cards** |  |
|  | **1.** | **D** |
|  | **2.** | **C** |
|  | **3.** | **E** |
|  | **4.** | **H** |
|  | **5.** | **A** |
|  | **6.** | **B** |
|  | **7.** | **F** |
|  | **8.** | **G** |
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