Skills 3-3 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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|  | Example | Problem |
| 1 | (10xy3)(8x5y3)  80x6y6 | (3u4v5)(7u2v3) |
| 2 |  |  |
| 3 | (2p3 . 2p)2  (4p4)2  42p8 =16p8 | (3x . 2x)2 |
| 4 | (5.7 x 102)(1.4 x101)  7.98 x 103 | (5.7 x 102)(1.4 x101) |
| 5 | 2.5 x 105 |  |

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|  | Example | Problem |
| 6 | What are the coordinates of triangle DEF where D (3, 6), E (5, 3) and F (4, 2) after a translation (1, -2)?  D’ (4, 4), E’ (6, 1), F’ (5, 0) | What are the coordinates of triangle ABC, where A (1, 5), B (2, 7) and C (3, 6) after a translation (-2, 4)? |
| 7 | What are the coordinates of quadrilateral QRST where Q (-5, -4), R (-3, 0), S (1, -2) and T (1, 5) after a rotation of 180o?  Q’ (5, 4), R’ (3, 0), S’ (-1, 2), T’ (-1, -5) | What are the coordinates of quadrilateral WXYZ, where W (-1, -4), X (-2, 3), Y (4, -2) and Z (5, 0) after a rotation of 180o? |
| 8 | The sum of the angles in a triangle is 180o. | Which set of angle measures could be the interior angles of a triangle?  a.) 90o, 90o, 90o  b.) 80o, 80o, 200o  c.) 40o, 50o, 60o  d.) 15o, 30o, 135o |
| 9 | In a pentagon, the angles measure 82o, 97o, 103o and 128o. What is the remaining angle?  82 + 97 + 103 + 128 = 410  540 – 410 = 130o | In a pentagon, the angles measures 72o, 93o, 101o and 176o. What is the remaining angle? |
| 10 | A 14 ft tall telephone pole casts a shadow that is 21 ft long. Find the length of a shadow of a flag pole that is 10 feet high.      x = 15 ft tall shadow | A statute that is 12 ft tall casts a shadow that is 15 ft long. Find the length of the shadow that a 8 ft cardboard box casts. |