|  |  |
| --- | --- |
| 1. **Multiply. Write the answer in *standard form*.**   (4 – 6*i*)(4 + 6*i*) | 1. **Multiply. Write the answer in *standard form*.** |
|  |  |
| 1. **Divide. Write the answer in *standard form.*** | 1. **Solve for *x* and *y*.**   (3*x* + 4) + (5*y* – 1) = 25 – 9*i* |
|  |  |
| 1. **Solve using the *square root property.***   (*x* – 3)2 = 5 | 1. **Solve by *completing the square*.**   3*x*2 + 2*x* + 5 = 0 |

|  |  |
| --- | --- |
| 1. **Solve by *factoring.*** | 1. **Solve by the method of your choice.**   2*x*2 – 8*x* = 11 |
|  |  |
| 1. **The product of two consecutive positive even integers is 80. Write an equation and find the integers.** | 1. **The sum of a number and its reciprocal is . Write an equation and find the numbers.** |
|  |  |
| 1. **Solve** | 1. **Solve.** |

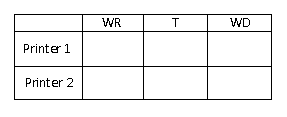
1. **Solve.**

****

1. Solve.



1. Two pumps can fill a pool in  hours when working simultaneously. Alone, Pump A takes 4 hours longer to fill the pool than Pump B. If Pump B is broken, how long will it take to fill the pool?



Pipe 1

Pipe 2

1. A motorboat makes an 8-hour round trip on a river, traveling 45 miles upstream and 45 miles downstream. If the boat travels 12 miles per hour in still water, what is the rate of the river’s current?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Rate** | **Time** | **Distance** |
| **Upstream** |  |  |  |
| **Downstream** |  |  |  |