**Find the product of each expression below using the rules for multiplying integers.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.** | $$-55\*\left(-4\right)=$$ | **2.** | $$17\*\left(-14\right)=$$ | **3.** | $$-12\*20=$$ |
|  |  |  |  |  |  |
| **4.** | $$-20\*(-11)=$$ | **5.** | $$10\*65=$$ | **6.** | $$100\*(-15)=$$ |
|  |  |  |  |  |  |

**Find the quotient of each expression below using the rules for dividing integers.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **7.** | $$-125÷\left(-25\right)=$$ | **8.** | $$165÷\left(-3\right)=$$ | **9.** | $$\frac{-200}{10}=$$ |
|  |  |  |  |  |  |
| **10.** | $$-120÷(-12)=$$ | **11.** | $$-7,921÷89=$$ | **12.** | $$\frac{96}{-6}=$$ |
|  |  |  |  |  |  |

**Solve each expression below.**

|  |  |  |  |
| --- | --- | --- | --- |
| **13.** | $$ \left(-81\right)÷\left(-27\right)\*(-4)=$$ | **14.** | $$ 2,744÷\left(-14\right)\*(-13)=$$ |
|  |  |  |  |
| **15.** | $$ 12\*\left(-12\right)÷\left[-44÷44\right]^{2}=$$ | **16.** | $$ \left[-48÷2\right]^{2}\*\left[12÷(-6)\right]^{2}=$$ |
|  |  |  |  |

**Solve each expression below using the order of operations.**

|  |  |  |  |
| --- | --- | --- | --- |
| **17.** | $$ \left(-81\right)+\left(-12\right)\*5-(-289)÷17=$$ | **18.** | $$ 126÷\left(-3\right)+\left(-11\right)\*(-18)=$$ |
|  |  |  |  |
| **19.** | $$ 12\*\left(-12\right)+\left[-256÷16\right]^{2}=$$ | **20.** | $$ \left[40÷(-8)\right]^{2}- \left[10\*\left(-2\right)\right]^{2}+21=$$ |
|  |  |  |  |

**WORD PROBLEMS**

|  |  |
| --- | --- |
| **21.** | In May, Ana made one deposit of $$ 200$ to her savings account and made 3 withdrawals of $$ 50$ each. How much money she had in her account at the end of May? |
|  |  |
| **22.** | A bus had 30 passengers. At each of the next 3 stops on the route, 6 passengers got off the bus. At the fifth stop, 10 passengers got on the bus. How many passengers were on the bus after the fifth stop? |
|  |  |

**ANSWERS**

**Find the product of each expression below using the rules for multiplying integers.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.** | $$-55\*\left(-4\right)=$$ | **2.** | $$17\*\left(-14\right)=$$ | **3.** | $$-12\*20=$$ |
|  | $$-55\*\left(-4\right)=220$$ |  | $$17\*\left(-14\right)=-238$$ |  | $$-12\*20=-240$$ |
| **4.** | $$-20\*(-11)=$$ | **5.** | $$10\*65=$$ | **6.** | $$100\*(-15)=$$ |
|  | $$-20\*(-11)=220$$ |  | $$10\*65=650$$ |  | $$100\*\left(-15\right)=-1,500$$ |

**Find the quotient of each expression below using the rules for dividing integers.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **7.** | $$-125÷\left(-25\right)=$$ | **8.** | $$165÷\left(-3\right)=$$ | **9.** | $$\frac{-200}{10}=$$ |
|  | $$-125÷\left(-25\right)=5$$ |  | $$165÷\left(-3\right)=-55$$ |  | $$\frac{-200}{10}=-2$$ |
| **10.** | $$-120÷(-12)=$$ | **11.** | $$-7,921÷89=$$ | **12.** | $$\frac{96}{-6}=$$ |
|  | $$-120÷(-12)=10$$ |  | $$-7,921÷89=-89$$ |  | $$\frac{96}{-6}=-16$$ |

**Solve each expression below.**

|  |  |  |  |
| --- | --- | --- | --- |
| **13.** | $$ \left(-81\right)÷\left(-27\right)\*(-4)=$$ | **14.** | $$ 2,744÷\left(-14\right)\*(-13)=$$ |
|  | $$ \left(-81\right)÷\left(-27\right)\*(-4)=$$$$=3\*(-4)=$$$$=-12$$ |  | $$ 2,744÷\left(-14\right)\*\left(-13\right)=$$$$=\left(-196\right)\*(-13)=$$$$=2,548$$ |
| **15.** | $$ 12\*\left(-12\right)÷\left[-44÷44\right]^{2}=$$ | **16.** | $$ \left[-48÷2\right]^{2}\*\left[12÷(-6)\right]^{2}=$$ |
|  | $$ 12\*\left(-12\right)÷\left[-44÷44\right]^{2}=$$$$ =-144÷\left[-1\right]^{2}=$$$$=-144÷1=$$$$=-144$$ |  | $$ \left[-48÷2\right]^{2}\*\left[12÷(-6)\right]^{2}=$$$$= \left[-24\right]^{2}\*\left[-2\right]^{2}=$$$$=576\*4=$$$$=2,304$$ |

**Solve each expression below using the order of operations.**

|  |  |  |  |
| --- | --- | --- | --- |
| **17.** | $$ \left(-81\right)+\left(-12\right)\*5-(-289)÷17=$$ | **18.** | $$ 126÷\left(-3\right)+\left(-11\right)\*(-18)=$$ |
|  | $$ \left(-81\right)+\left(-12\right)\*5-\left(-289\right)÷17=$$$$=\left(-81\right)+\left(-60\right)-(-17)=$$$$=\left(-141\right)-(-17)=$$$$=\left(-141\right)+17=$$$$=-124$$ |  | $$ 126÷\left(-3\right)+\left(-11\right)\*(-18)=$$$$=-42+198=$$$$=156$$ |
| **19.** | $$ 12\*\left(-12\right)+\left[-256÷16\right]^{2}=$$ | **20.** | $$ \left[40÷(-8)\right]^{2}- \left[10\*\left(-2\right)\right]^{2}+21=$$ |
|  | $$ 12\*\left(-12\right)+\left[-256÷16\right]^{2}=$$$$= 12\*\left(-12\right)+\left[-16\right]^{2}=$$$$= 12\*\left(-12\right)+256=$$$$= -144+256=$$$$=112$$ |  | $$ \left[40÷(-8)\right]^{2}- \left[10\*\left(-2\right)\right]^{2}+21=$$$$= \left[-5\right]^{2}-\left[-20\right]^{2}+21=$$$$=25-400+21=$$$$=25+(-400)+21=$$$$=-375+21=$$$$=-354$$ |

**WORD PROBLEMS**

|  |  |
| --- | --- |
| **21.** | In May, Ana made one deposit of $$ 200$ to her savings account and made 3 withdrawals of $$ 50$ each. How much money she had in her account at the end of May? |
|  | $$\$200-3\*\$50=$$$$\$200-\$150=\$50$$At the end of May she had$ \$50$**.** |
| **22.** | A bus had 30 passengers. At each of the next 3 stops on the route, 6 passengers got off the bus. At the fifth stop, 10 passengers got on the bus. How many passengers were on the bus after the fifth stop? |
|  |  $30-3\*6+10=$$$=30-18+10=$$$$=12+10=$$$$=22$$On the bus after the fifth stop were$ 22$ passengers. |