**Find the value of each numerical expression. Follow the order of operations when finding each value.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.** | $$ 25-15+10-11=$$ | **2.** | $$ 12÷4\*10÷15=$$ | **3.** | $$ 124\*3\*10+15=$$ |
|  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **4.** | $$ 225÷5+10=$$ | **5.** | $$196÷14+8\*11=$$ | **6.** | $$ 140-12+49÷7=$$ |
|  |  |  |  |  |  |
| **7.** | $$ 324÷9-15÷3=$$ | **8.** | $$19+144÷2÷18=$$ | **9.** | $$ 900-12\*4÷6=$$ |
|  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **10.** | $$ 72+8^{2}÷16+12=$$ | **11.** | $$ 14^{2}\*8-25^{2}÷25=$$ |
|  |  |  |  |
| **12.** | $$ 120÷2^{2}\*7^{2}-320÷80=$$ | **13.** | $$ 520+12^{2}÷4^{2}-230=$$ |
|  |  |  |  |
| **14.** | $$ 400÷2^{3}-4^{2}-26^{2}÷13=$$ | **15.** | $$ 54\*10^{3}-14^{2}-338÷13=$$ |
|  |  |  |  |

**Find the value of each numerical expression. Follow the order of operations when finding each value.**

|  |  |  |  |
| --- | --- | --- | --- |
| **16.** | $$ 400-\left(45\*2\right)-(32-4)=$$ | **17.** | $$ 300÷(60÷2-10-75÷15)$$ |
|  |  |  |  |
| **18.** | $$ (100÷4-5)-72÷9=$$ | **19.** | $$ (210÷7+5)-(144÷6-1)=$$ |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **20.** | $$ 9^{2}-\left(45-6^{2}\right)+(32÷4)=$$ | **21.** | $$ 254+\left(9^{2}-6^{2}\*2\right)^{2}=$$ |
|  |  |  |  |
| **22.** | $$ \left(15^{2}÷25-5\right)\*\left(72÷3^{2}\right)+65=$$ | **23.** | $$\left[\left(32÷2^{3}\right)+4\*2\right]^{2}-(14÷7-1)=$$ |
|  |  |  |  |

**Solve the following problems.**

|  |  |
| --- | --- |
| **24.** | Mark has $1,000. He spends $910 on shopping. Later he divides all the money into three parts out of which two parts were distributed and one part he keeps for himself. Then he found $100 on the road. Write the final expression and find the money he has left? |
|  |  |
| **25.** | Annabel had $50 and withdrew $800 from his bank account. She bought a bag for $45.00, 2 shirts for $150.00 each, and 2 pairs of shoes for $199.00 each. Give the final expression, and determine how much money Annabel had at the end of the shopping day. |
|  |  |

**ANSWERS**

**Find the value of each numerical expression. Follow the order of operations when finding each value.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.** | $$ 25-15+10-11=$$ | **2.** | $$ 12÷4\*10÷15=$$ | **3.** | $$ 124\*3\*10+15=$$ |
|  | $$ 25-15+10-11=$$$$=10+10-11=$$$$=20-11=$$$$=9$$ |  | $$ 12÷4\*10÷15=$$$$=3\*10÷15=$$$$=30÷15=$$$$=2$$ |  | $$ 124\*3\*10+15=$$$$=372\*10+15=$$$$=3,720+15=$$$$=3,735$$ |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **4.** | $$ 225÷5+10=$$ | **5.** | $$196÷14+8\*11=$$ | **6.** | $$ 140-12+49÷7=$$ |
|  | $$ 225÷5+10=$$$$=45+10=$$$$=55$$ |  | $$ 196÷14+8\*11=$$$$=14+88=$$$$=102$$ |  | $$ 140-12+49÷7=$$$$=140-12+7=$$$$=128+7=$$$$=135$$ |
| **7.** | $$ 324÷9-15÷3=$$ | **8.** | $$19+144÷2÷18=$$ | **9.** | $$ 900-12\*4÷6=$$ |
|  | $$ 324÷9-15÷3=$$$$=36-5=$$$$=31$$ |  | $$ 19+144÷2÷18=$$$$=19+72÷18=$$$$=19+4=$$$$=23$$ |  | $$ 900-12\*4÷6=$$$$=900-48÷6=$$$$=900-8=$$$$=892$$ |

|  |  |  |  |
| --- | --- | --- | --- |
| **10.** | $$ 72+8^{2}÷16+12=$$ | **11.** | $$ 14^{2}\*8-25^{2}÷25=$$ |
|  | $$ 72+8^{2}÷16+12=$$$$=72+64÷16+12=$$$$=72+4+12=$$$$=76+12=$$$$=88$$ |  | $$ 14^{2}\*8-25^{2}÷25=$$$$=196\*8-625÷25=$$$$=1,568-25=$$$$=1,543$$ |
| **12.** | $$ 120÷2^{2}\*7^{2}-320÷80=$$ | **13.** | $$ 520+12^{2}÷4^{2}-230=$$ |
|  | $$ 120÷2^{2}\*7^{2}-320÷80=$$$$=120÷4\*49-320÷80=$$$$=30\*49-320÷80=$$$$=1,470-4=$$$$=1,466$$ |  | $$ 520+12^{2}÷4^{2}-230=$$$$=520+144÷16-230=$$$$=520+9-230=$$$$=529-230=$$$$=299$$ |
| **14.** | $$ 400÷2^{3}-4^{2}-26^{2}÷13=$$ | **15.** | $$ 54\*10^{3}-14^{2}-338÷13=$$ |
|  | $$ 400÷2^{3}-4^{2}+26^{2}÷13=$$$$=400÷8-16+676÷13=$$$$=50-16+52=$$$$=34+52=$$$$=86$$ |  | $$ 54\*10^{3}-14^{2}-338÷13=$$$$=54\*1,000-196-338÷13=$$$$=54,000-196-26=$$$$=53,804-26=$$$$=53,778$$ |

**Find the value of each numerical expression. Follow the order of operations when finding each value.**

|  |  |  |  |
| --- | --- | --- | --- |
| **16.** | $$ 400-\left(45\*2\right)-(32-4)=$$ | **17.** | $$ 300÷(60÷2-10-75÷15)$$ |
|  | $$ 400-\left(45\*2\right)-\left(32-4\right)=$$$$=400-90-28=$$$$=310-28=$$$$=282$$ |  | $$ 300÷\left(60÷2-10-75÷15\right)=$$$$=300÷\left(30-10-5\right)=$$$$=300÷\left(20-5\right)=$$$$=300÷15=$$$$=20$$ |
| **18.** | $$ (100÷4-5)-72÷9=$$ | **19.** | $$ (210÷7+5)-(144÷6-1)=$$ |
|  | $$ \left(100÷4-5\right)-72÷9=$$$$=\left(25-5\right)-72÷9=$$$$=20-72÷9=$$$$=20-8=$$$$=12$$ |  | $$ \left(210÷7+5\right)-\left(144÷6-1\right)=$$$$=\left(30+5\right)-\left(24-1\right)=$$$$=35-23=$$$$=12$$ |

|  |  |  |  |
| --- | --- | --- | --- |
| **20.** | $$ 9^{2}-\left(45-6^{2}\right)+(32÷4)=$$ | **21.** | $$ 254+\left(9^{2}-6^{2}\*2\right)^{2}=$$ |
|  | $$ 9^{2}-\left(45-6^{2}\right)+(32÷4)=$$$$=81-\left(45-36\right)+8=$$$$=81-9+8=$$$$=72+8=$$$$=80$$ |  | $$ 254+\left(9^{2}-6^{2}\*2\right)^{2}=$$$$=254+\left(81-36\*2\right)^{2}=$$$$=254+\left(81-72\right)^{2}=$$$$=254+\left(9\right)^{2}=$$$$=254+81=$$$$=335$$ |
| **22.** | $$ \left(15^{2}÷25-5\right)\*\left(72÷3^{2}\right)+65=$$ | **23.** | $$\left[\left(32÷2^{3}\right)+4\*2\right]^{2}-(14÷7-1)=$$ |
|  | $$ \left(15^{2}÷25-5\right)\*\left(72÷3^{2}\right)+65=$$$$=\left(225÷25-5\right)\*\left(72÷9\right)+65=$$$$=\left(9-5\right)\*8+65=$$$$=4\*8+65=$$$$=32+65=$$$$=97$$ |  | $$ \left[\left(32÷2^{3}\right)+4\*2\right]^{2}-(14÷7-1)=$$$$=\left[\left(32÷8\right)+4\*2\right]^{2}-(2-1)=$$$$=\left[4+4\*2\right]^{2}-1=$$$$=\left[4+8\right]^{2}-1=$$$$=\left[12\right]^{2}-1=$$$$=144-1=$$$$=143$$ |

**Solve the following problems.**

|  |  |
| --- | --- |
| **24.** | Mark has $1,000. He spends $910 on shopping. Later he divides all the money into three parts out of which two parts were distributed and one part he keeps for himself. Then he found $100 on the road. Write the final expression and find the money he has left? |
|  | $$ \left(1,000-910\right)÷3+100=$$$$=90÷3+100=$$$$=30+100=$$$$=130$$ |
| **25.** | Annabel had $50 and withdrew $800 from his bank account. She bought a bag for $45.00, 2 shirts for $150.00 each, and 2 pairs of shoes for $199.00 each. Give the final expression, and determine how much money Annabel had at the end of the shopping day. |
|  | $$ \left(50+800\right)-(45+2\*150+2\*199)=$$$$=850-\left(45+300+398\right)=$$$$=850-\left(345+398\right)=$$$$=850-743=$$$$=107$$ |