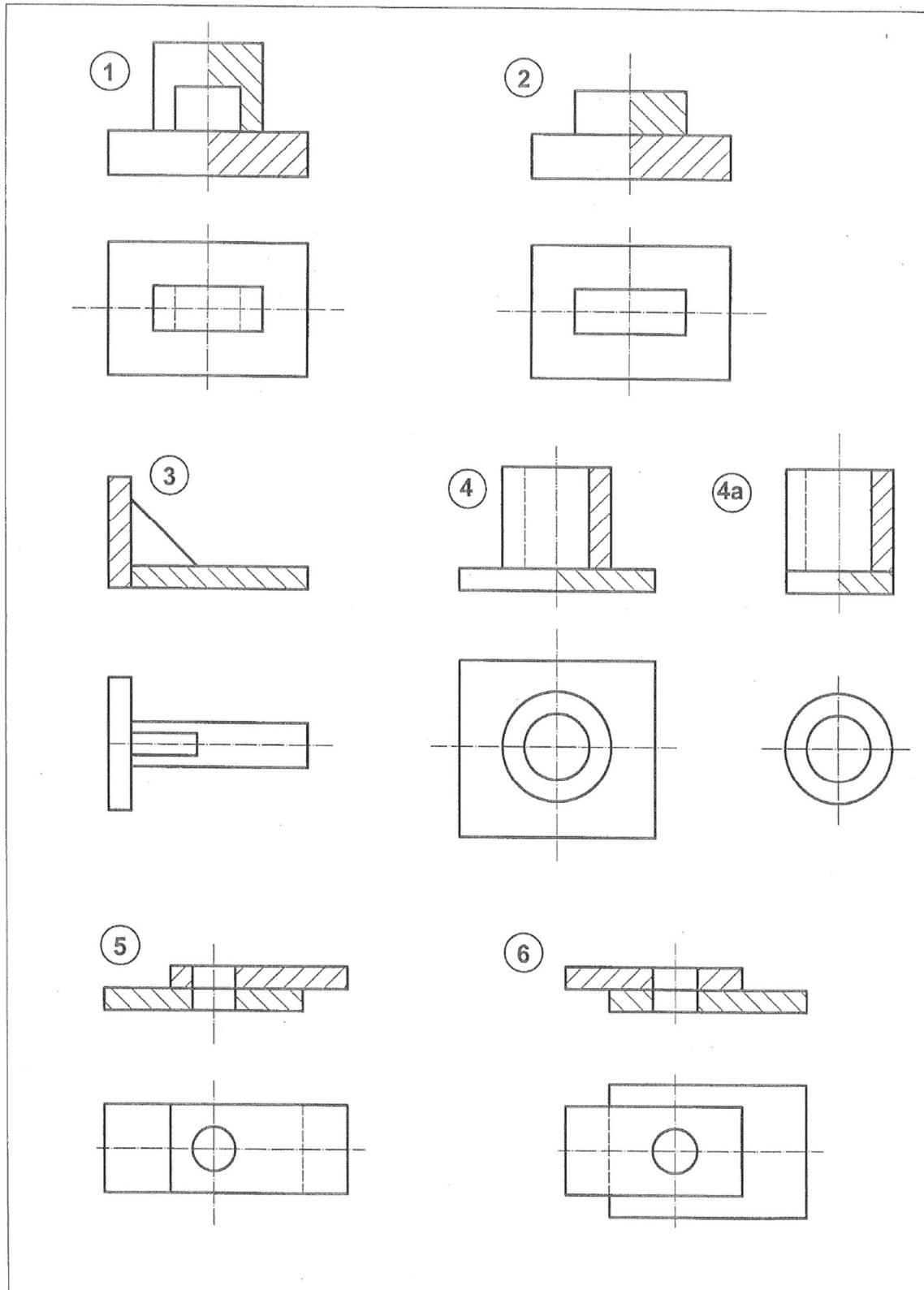
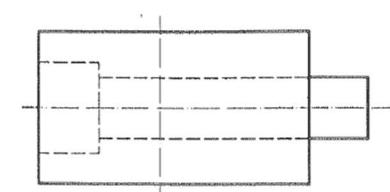
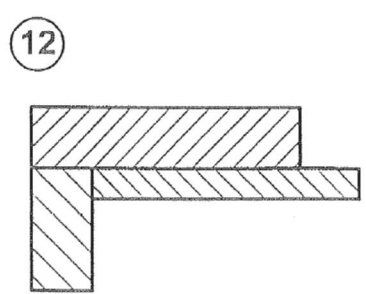
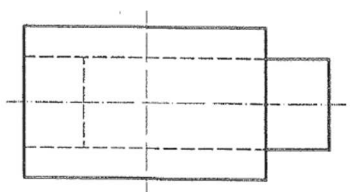
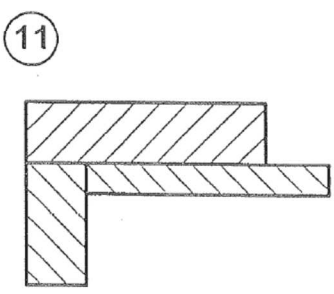
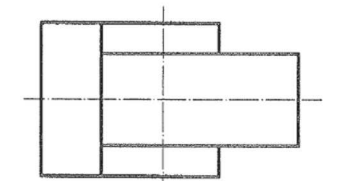
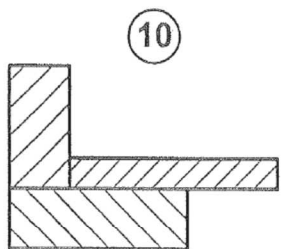
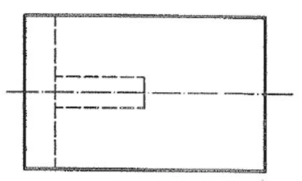
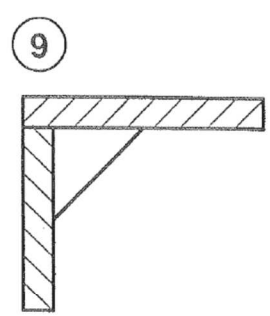
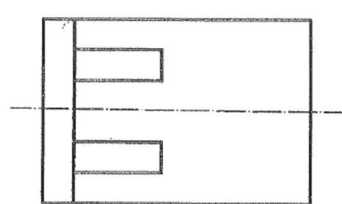
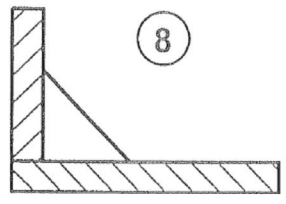
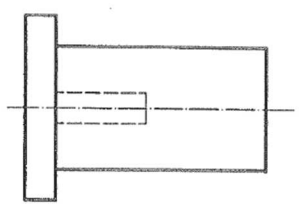
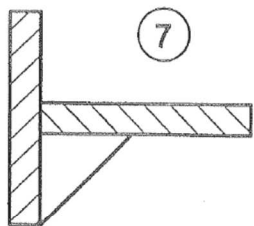


## Zad. 7.1 – Połączenia spawane

Narysować w dwóch rzutach połączenia spawane w uproszczeniu i zwymiarować.





### **Zad. 7.2 – Połączenia gwintowe rurowe**

Narysować w półwidoku-półprzekroju połączenie rurowe gwintowe. Na rurę o długości 1[m] obustronnie nagwintowanej nakręcono kształtki: złączkę normalną, trójnik lub kolano (wg decyzji Prowadzącego). Na rysunku zaznacz wymiary: średnicę nominalną rury, wymiar gwintu oraz całkowitą długość połączenia.

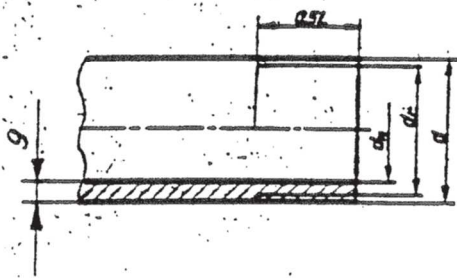
Proporcje wymiarowe elementów połączenia wg Tab.2

Tabela 2

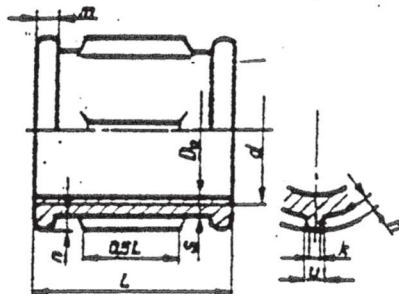
| Lp | Srednica nom.     | Srednica gwintu rury lub złączki | Srednica rdzenia rury lub otworu złączki | $d_f$ | $d_w$ | $a$ | $c$ | $h$ | $L$ | $l$ | $s$ | $m$ | $n$ | $k$ | $u$ | $R$ | $g$  |
|----|-------------------|----------------------------------|--|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|    | $d_{nom}$<br>cale | $d$<br>mm                        | $d_r = D_o$<br>mm                        | mm    |       |     |     |     |     |     |     |     |     |     |     |     |      |
| 1  | 1/8"              | 9,7                              | 8,6                                      | 10,2  | 6     | 29  | 10  | 4   | 19  | 7   | 2,2 | 3   | 1,5 | 1,5 | 3   | 12  | 2,3  |
| 2  | 1/4"              | 13,2                             | 11,4                                     | 13,7  | 8     | 36  | 13  | 4   | 21  | 10  | 2,4 | 3   | 1,5 | 1,5 | 3   | 13  | 3,0  |
| 3  | 3/8"              | 16,7                             | 15,0                                     | 17,2  | 10    | 38  | 21  | 5   | 25  | 10  | 2,6 | 3   | 2   | 2   | 3,5 | 15  | 3,5  |
| 4  | 1/2"              | 20,9                             | 18,6                                     | 21,5  | 15    | 44  | 27  | 5   | 32  | 14  | 2,8 | 3,5 | 2   | 2   | 4   | 18  | 3,5  |
| 5  | 3/4"              | 26,4                             | 24,1                                     | 27,0  | 20    | 47  | 30  | 5,5 | 36  | 16  | 3,0 | 4   | 2,5 | 2   | 4   | 20  | 4,0  |
| 6  | 1"                | 33,2                             | 30,3                                     | 34,0  | 25    | 53  | 41  | 6   | 40  | 18  | 3,3 | 4   | 2,5 | 2,5 | 4,5 | 24  | 4,5  |
| 7  | 1 1/4"            | 41,9                             | 39,0                                     | 42,5  | 32    | 57  | 50  | 6,5 | 46  | 20  | 3,6 | 4   | 3   | 2,5 | 5   | 30  | 5,6  |
| 8  | 1 1/2"            | 47,8                             | 44,8                                     | 48,5  | 40    | 59  | 55  | 6,5 | 52  | 22  | 4,0 | 4   | 3   | 3   | 5   | 34  | 6,3  |
| 9  | 2"                | 59,6                             | 56,6                                     | 60,5  | 50    | 68  | 70  | 7   | 60  | 24  | 4,5 | 5   | 3,5 | 3   | 6   | 41  | 10,0 |
| 10 | 2 1/2"            | 75,2                             | 72,2                                     | 76,5  | 65    | 75  | 95  | 7   | 72  | 27  | 5,0 | 5   | 3,5 | 3,5 | 6,5 | 50  | 11,0 |
| 11 | 3"                | 87,9                             | 84,9                                     | 90,0  | 80    | 83  | 115 | 7,5 | 82  | 30  | 5,5 | 6   | 4   | 4   | 7   | 60  | 12,5 |
| 12 | 4"                | 113,0                            | 110,1                                    | 116,0 | 100   | 95  | 145 | 8   | 96  | 36  | 6,5 | 7   | 4   | 4   | 8   | 66  | 13,0 |
| 13 | 5"                | 138,4                            | 135,5                                    | 142,4 | 125   | 110 | 160 | 8,5 | 115 | 40  | 7,5 | 8   | 4,5 | 4,5 | 9   | 75  | 14,0 |
| 14 | 6"                | 163,8                            | 160,9                                    | 168,0 | 150   | 120 | 210 | 9   | 131 | 40  | 9,0 | 9   | 4,5 | 4,5 | 9   | 91  | 15,0 |

**Kształtki**

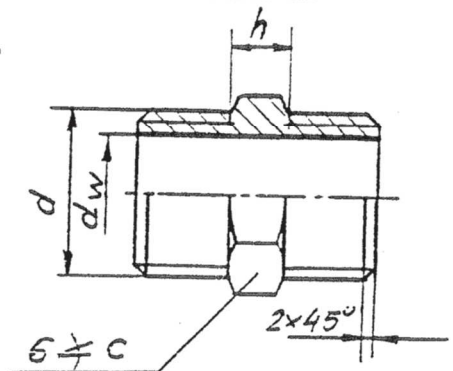
**Czop rury C**



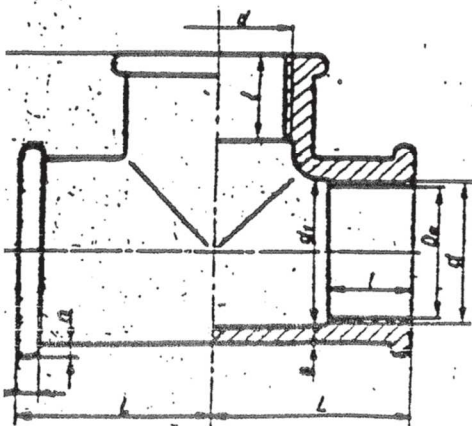
**Złączka normalna M**



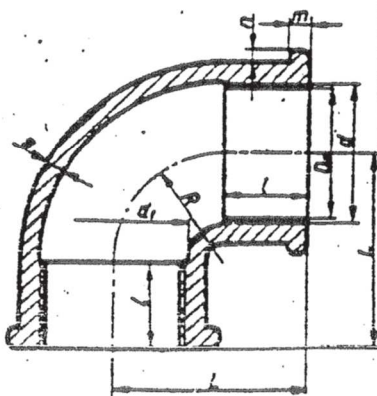
**Złączka wkrętna N**



**Trojnik B**

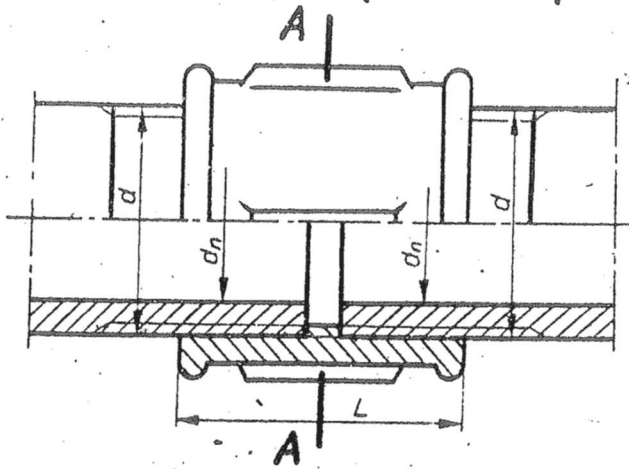


**Kolano A**



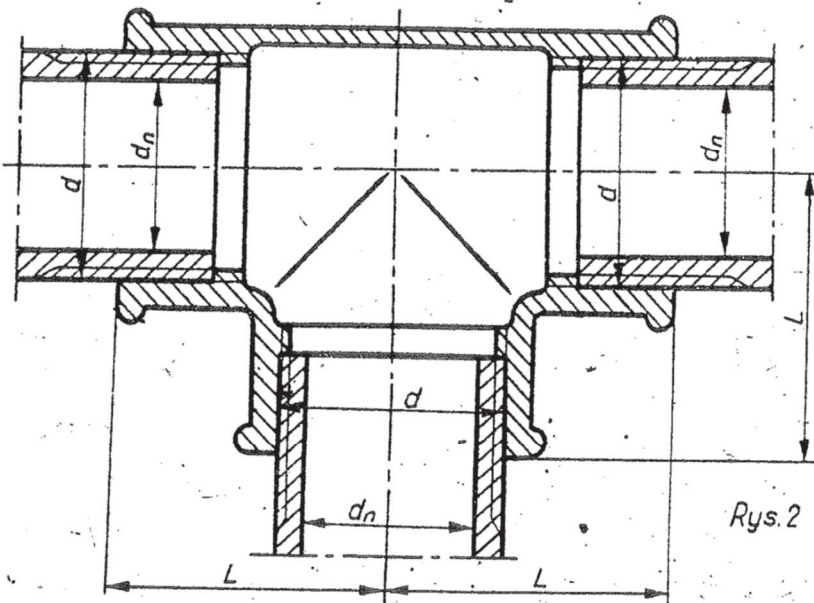
# Złącza rurowe gwintowe

## Połączenie rur złączką normalną



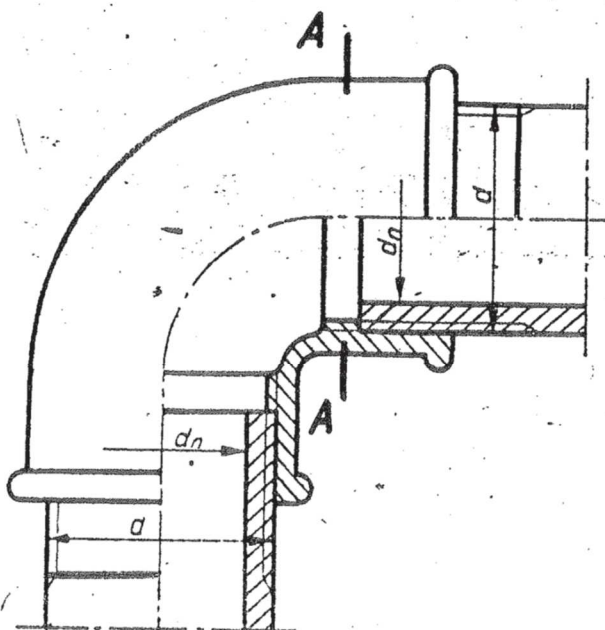
Rys. 1

## Połączenie rur trójnikiem



Rys. 2

## Połączenie rur kolanem



Rys. 3

A-A

A-A